Annual Report

2002-2003
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Credits

Compilation and Editing : D. Rama Rao
                        B.S. Sontakki
                        R.V.V.S. Prakasa Rao
                        G. Aneeja

Cover Design & Layout : P. Namdev

Photography : L. Venkateswarlu

Published by : Director, NAARM
Phone : 040-24015394; 24015395
Fax : 040-24015912
E-mail : naarm.hyd@naarm.ernet.in
Grams : NAARM
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Preface

The Academy has been the lead center in providing the human resource development backup to the NARS and policy support to ICAR. In the process of bringing about change in attitude, value system, and commitment in agricultural scientists, NAARM has played a significant role by conducting training programmes, seminars, workshops, and interactive sessions. Brainstorming sessions addressing policy and function-level problems, with the participation of administrative and finance functionaries and scientists of NARS, brought out important suggestions for solving the difficult impediments that are crippling the system. During this period, 36 programmes were held, and a total of 829 scientists, teachers, administrators and finance officers were trained. The Academy also conducted three off-campus programmes one for the top executives of ICAR at IIM, Ahmedabad and the other at Shillong and Parabhani.

Significant achievements of the year was the successful completion of ICAR/NAARM-ISNAR collaborative project on Distance Training for Agricultural Research Management, AP Cess Project on HRD Strategies for Organizational Effectiveness of NARS. Utilization of funds for maintaining and creating infrastructure facilities for effective conduct of training programmes has been accomplished satisfactorily by developing a Spacial Information System for Agricultural Production and Resources.

The ICAR Inter-institutional Tournament (Zone III) was hosted by the Academy, and NAARM won the second overall team championship. The Academy also bagged several trophies at the Annual Rose Show organized by Horticultural Society.

I wish to take this opportunity to put on record our sincere thanks and gratitude for the support, guidance, and encouragement received from Dr Mangala Rai, Director General, ICAR, and Secretary, DARE, Govt. of India; Mrs Sashi Mishra, Secretary, ICAR and Dr J.C. Katyal, DDG (Education), ICAR, New Delhi.

Dr D. Rama Rao, Head, ICM Division, with the able support from Dr B.S. Sontakki, took all the trouble and whole responsibility to collect the information and prepare the report in the present form. The assistance of Mr R.V.V.S. Prakasa Rao and Mr P. Namdev in layout design and printing is highly appreciated. All the faculty members and Heads deserve appreciation for their timely supply of information. I compliment all technical, administrative and supporting staff as well as trainees for their contribution to the Academy.

October 30, 2003
Hyderabad

(B.N. Mathur)
Executive Summary
Executive Summary

Ever since its inception in 1976, the National Academy of Agricultural Research Management (NAARM) has played a pivotal role in strengthening the Indian National Agricultural Research System (NARS) through its multifarious contributions. It has been the lead centre in providing the human resource development backup to the NARS and policy support to the Indian Council of Agricultural Research (ICAR). During 2002-2003, NAARM continued to support the Indian NARS as well as those of the other developing countries in the areas of agricultural research and education management. Salient achievements of the institute are presented briefly.

The Academy’s yearlong Silver Jubilee Celebrations concluded with a National Seminar on “Management - A Key for Improved Performance” as a part of Foundation Day Celebrations on September 1, 2002.

As a part of the HRD activities, a wide variety of training programmes were organized by the Academy for the benefit of scientists / faculty from ICAR and State Agricultural Universities (SAUs) within the country as well as from the developing country Yemen. During the reported period 36 such programmes were held, and a total of 829 scientists, teachers, administrators and finance officers participated in these programmes. The Academy also conducted three off-campus programmes viz. Retreat Programme for Top Executives of ICAR (Phase II) at IIM, Ahmedabad; agricultural officers of Government of Meghalaya at Shillong and faculty of College of Veterinary and Animal Sciences, Parbhani. A total of eighty-four participants representing top level executives, researchers, academicians, extension officers participated and got benefitted in these programmes.

During the bygone year, NAARM hosted three Summer / Winter Schools viz. Recent Advances in Agricultural Research Project Management; Recent Advances in Educational Methodology and Instructional Technology; and Management of Human Resources in Agriculture. In all, seventy-six scientists from ICAR institutes and SAUs participated and got benefitted.

One of the significant achievements of the year was the successful completion of ICAR/NAARM-ISNAR collaborative project on Distance Training for Agricultural Research Management. As a concluding activity of this project a National Conference on Distance Training was organized during November, 7-8, 2002 at the Academy to obtain a national consensus on the redesigned distance training strategy for NARS and released the Adaptive Research Report of the project. The proposal for a Distance Training Centre at NAARM was also presented and discussed.

The AP Cess Project on HRD Strategies for Organizational Effectiveness of NARS was completed on March 31, 2002. The project report was submitted to the Education Division of ICAR and a National Workshop on HRD Strategies for Organizational Effectiveness of NARS was organized on March 11-12, 2003. The project report was released in the workshop.

Under the NATP project on Performance Assessment and Accountability Enhancement of Indian National Agricultural Research Organizations (NAROs), a National Workshop on Performance Assessment of Agricultural Research Organizations was organized on March 3rd and 4th, 2003 to refine the methodological
framework developed on the basis of information elicited from the senior level functionaries, both working and retired, in the NARS after critical examination. Thirty-five delegates including Directors of ICAR institutes and Vice Chancellors and Directors of Research from SAUs participated in the workshop.

The faculty members published 56 and presented 13 papers in various workshops, seminars, symposia etc. During the year, the Academy published number of publications viz. Silver Jubilee Souvenir, Training Achievements, Directory of FOCARS Participants, Project Report - FSR in India: Case Study, Directory of FET Centres and Eleven Occasional Papers viz. Training: Is it Panacea for all Performance Problems of Employees in R & D Organizations?; Electronic Commerce and the Opportunity for Agribusiness in India; Generating High Research Performance in ICAR: Reorienting Organizational Change to Team Performance and Developing People; Towards Labour Policy in Agricultural Research Institutes; Leading Change in ICAR: Organizational and Management Reforms; HRD Strategies for Integrating Agricultural Sciences with Corporate Business Management; Embedding the Sustainability Perspective into Agricultural Research: Implications for Agricultural Research Management; Orienting Agricultural Research for Direct Short-term Attack on Poverty – An Exploratory Study; Agricultural Education: Strategy for Tenth Five Year Plan; Integrating Information and Communication Technologies into Agricultural Research and Education in India; and Operationalizing Values and Value Systems in National Agricultural Research System.

A GIS training laboratory with five work stations, digitizer, ARCGIS, ERDAS, ARCIMS, Map Objects and Geomedia Grid was added to the Academy’s IT infrastructure.

The Academy won the Rajabhasha Shield of Town Official Language Implementation Committee South Central Railway for the year 2001 for the best work done in the implementation of the Official Language in twin cities.

The Academy won the second prize of the Rajashri Tandan Rajabhasha Puraskar of Indian Council of Agricultural Research (ICAR), New Delhi for the year 2001-2002 for the best work done in the implementation of the official language in the “C” region (Ga Kshetra).

Dr R. Kalpana Sastry, Senior Scientist, NAARM received the “Smt Chandaben Mohanbhai Patel Vasvik Award for women scientists -1999” instituted by Vividhalaxi Audyogik Samshodham Vikas Kendra (VASVIK), Mumbai, in recognition of the work on Safflower pathology and in empowerment of farm workers in agricultural research farms.

The Academy bagged the C.S. Hemanth Memorial Silver Trophy (Prince of the Show) for the best bloom amongst Indian Roses, and Musthi Laxminarayana Challenge Cup for queen of the show at the XXVII Annual Rose Show. In the Annual Rose Show organized by Horticultural Society, the Academy bagged five trophies viz. Prince of the show, Somavarapa Subbarao Memorial Rolling Cup; Rose Show Rolling Trophy; Ekbote Memorial Cup and Indo Agri-world Hyderabad Shild. Apart from the above the Academy won eight first prizes and five second prizes under different sections of flower display.

The ICAR Inter-institutional Tournament (Zone III) was hosted by the Academy, and NAARM won the second overall team championship with 50 points. Ms. K.K. Rukmini Ammal, NAARM, emerged as the women individual athletic champion. The Sports contingent secured thirteen individual prizes and two team event prizes.

The NAARM sports contingent, which participated in the Fifth Andhra Pradesh State Veteran Ameteur Athletic Meet - 2002 held at IGMC Stadium, Vijayawada, secured nine prizes.
Activities at a Glance

April, 2002

- An International training programme on Agricultural Research Management was organized for Yemen Participant from April 1 to June 30, 2002. Dr N.H. Rao coordinated the programme.

- A workshop on Motivation Techniques was undertaken from April 8 to 10, 2002, which was coordinated by Drs M.M. Anwer, K. H. Rao and R.V.S. Rao. Two participants took part in the workshop.

- A training programme on Agricultural Research Prioritization Techniques was organized for 24 participants from April 15 to 20, 2002. Drs B.S. Chandel and S.K. Soam were the coordinators.

- A Summer School on Recent Advances in Agricultural Research Project Management was conducted from April 15 to May 5, 2002. Under Dr T. Balaguru, Summer School Director, Drs S. Shanmugam, N.H. Rao, S.K. Nanda and S.K. Soam acted as coordinators. 27 participants attended this programme.

- A programme on Statistical Analysis for Socio-economic Research Data was organized from April 30 to May 4, 2002 by Drs K.V.S. Rao and M.N. Reddy in which four participants took part.

May, 2002

- A Summer School on Recent Advances in Educational Methodology and Instructional Technology was organized from May 7 to 27, 2002. Under Dr A. Gopalam, Summer School Director, Drs P. Manikandan, M.M. Anwer, B.S. Sontakki and K.H. Rao coordinated the programme, which was attended by 25 participants.

June, 2002

- A programme on Leadership and Personality Development was organized by Drs P. Manikandan and M.M. Anwer from June 10 to 15, 2002. Ten participants attended the programme.

- Refresher course on Information Technology in Agriculture was conducted for 37 participants from SAUs and ICAR institutes from June 12 to July 2, 2002. Drs M. Narayana Reddy and N.H. Rao were the course coordinators.

- Sixth Executive Development Programme in Agricultural Research Management was organized from June 14 to 18, 2002. Seven
participants took part in the programme. Drs Jagannadham Challa and S.N. Saha coordinated the programme.

- Workshop on Gahan Hindi Prashikshan was organized from June 18 to 22, 2002. Dr A. Gopalam and Mr Pradeep Singh were the facilitators of the workshop where overwhelming 47 delegates took part.

### July, 2002

- A training course on Stress Management was organized by Drs S. Shanmugam and P. Manikandan from July 1 to 6, 2002. Eight participants attended the training.

- A course on Computer Applications for Administrative and Financial Management was organized from July 17 to 27, 2002 by Drs K. Vidyasagar Rao, R. Kalpana Sastry and Mr S.K. Pathak. 46 administrative and financial personnel were benefited by this course.

- A workshop on Management of Agricultural Education was organized by Drs S.N. Saha and A. Gopalam from July 23 to 25, 2002 where 14 delegates took part in the workshop.

- A refresher course on Information Technology in Agriculture was conducted for the 36 SAUs and ICAR scientific personnel from July 31 to August 20, 2002. Drs K.V.S. Rao and B.S. Sontakki were the coordinators.

### August, 2002

- The 75th Foundation Course for Agricultural Research Service (FOCARS) was organized from August 1 to November 28, 2002 which was coordinated by Drs M.M. Anwer, N. Sandhya Shenoy and R.V.S. Rao. Twenty-three members attended the programme

- A training programme on Agricultural Research Prioritization Techniques was organized by Drs B.S. Chandel and S.K. Soam from August 26 to 31, 2002 in which 28 participants attended the programme.

### September, 2002

- Management Programme for Women Scientists was organized from September 2 to 7, 2002. Nine agriculture women scientists attended the programme. Drs N. Sandhya Shenoy and R. Kalpana Sastry coordinated the programme.

- A Winter School on advanced course on Management of Human Resources in Agriculture was organized from September 18 to October 8, 2002 for 25 participants by the team of Dr M.M. Anwer as Winter School Director, and Drs P. Manikandan, K.H. Rao, B.S. Sontakki, and R.V.S. Rao as the coordinators.
• A refresher course on Agricultural Research Project Management was conducted for 24 scientists from September 18 to October 8, 2002. Drs M.M. Anwer, D. Rama Rao and V.K.J. Rao were the coordinators.

• A training programme on Impact Assessment of Agricultural R&D was organized from September 19 to 25, 2002 by Drs B.S. Chandel and S.K. Soam where 11 participants attended the programme.

October, 2002

• Drs N. Sandhya Shenoy and M. Narayana Reddy coordinated a training programme on Web Designing and Developing Web Pages from October 3 to 9, 2002 for nine participants from different ICAR institutes and SAUs.

• A course on Computer Applications in Agriculture was conducted from October 22 to November 1, 2002 by Drs K.M. Reddy and K. Vidyasagar Rao. This programme benefited 13 participants.

• A training programme on Educational Video Production was organized by Mrs K.R. Prabhakar and N. Janardhan Rao from October 23 to November 2, 2002 in which 17 participants took part.

November, 2002

• Refresher course on Agricultural Research Project Management was organized by Drs S.N. Saha and R. Kalpana Sastry from November 6 to 26, 2002. 19 participants were benefited by this course.

• A training programme on GIS Applications in Agricultural Research was organized from November 20 to 30, 2002 for 7 participants. Drs M Narayana Reddy and N.H. Rao were the course coordinators.

• Seventh Management Development Programme in Agricultural Research was organized from November 21 to 27, 2002 for ten participants. Drs Jagannadhram Challa and R.V.S. Rao coordinated the programme.

• Workshop on Official Language Policy was conducted from November 27 to 30, 2002 in which 46 participants took part. Dr A. Gopalam and Mr D. Venkateswarlu were the facilitators for the workshop.

December, 2002

• Refresher course on Information Technology in Agriculture was organized from December 3 to 23, 2002 for 36 participants. Drs K. Vidyasagar Rao and K.M. Reddy coordinated the course.

January, 2003

• Management Development Programme for Comptrollers of State
Activities at a glance

Agricultural Universities was organized on January 6 and 7, 2003 by Dr S.N. Saha for 32 participants.

- An internal training programme on Office Automation for the 27 administrative and technical staff of different cadres of NAARM was organized from January 21 to 25, 2003. Dr D. Rama Rao coordinated the programme.

**February, 2003**

- A Refresher course on Information Technology in Agriculture was organized from February 5 to 25, 2003. There were 12 participants in the course coordinated by Drs A. Gopalam and B.S. Sontakki.

- A workshop on Gahan Hindi Prashikshan was conducted from February 18 to 22, 2003 for 49 participants. Dr A. Gopalam and Mrs J. Renuka facilitated the workshop.

- A Management Development Programme for Field Experience Training (FET) Coordinators was organized from February 20 to 26, 2003. Drs P. Manikandan, S.N. Saha and N. Sandhya Shenoy coordinated the programme attended by 14 FET coordinators.

**March, 2003**

- Workshop on Performance Assessment of Agricultural Research Organizations was organized on March 3 and 4, 2003 for 35 senior functionaries from SAUs and ICAR institutes. Drs T. Balaguru, R. Kalpana Sastry, R.V.S. Rao facilitated the workshop.

- A training programme on GIS Applications in Agricultural Research was organized from March 3 to 12, 2003 by Drs N.H. Rao and M. N. Reddy. There were 16 participants in this programme.

- A workshop on HRD Strategies for Organizational Effectiveness of NARS was organized on March 11 and 12, 2003. Drs Jagannadham Challa and K. Vidyasagar Rao facilitated the workshop attended by 65 participants.

- An Executive Development Programme for Educational Methodology and Instructional Technology was organized at Maharashtra Agricultural University, Pharbani from March 15 to 21, 2003. Drs A. Gopalam and K.H. Rao coordinated the off-campus-training programme.

- An Advanced Course on Web Design was organized from March 24 to 29. Drs M. N. Reddy and N. Sandhya Shenoy coordinated the training programme attended by 15 participants.
Introduction
Introduction

The National Academy of Agricultural Research Management (NAARM) is premiere institute in India and one of its kind in Asia engaged in the training activities in agricultural research management. The Academy is primarily engaged in foundation training to the new entrants of the Agricultural Research Service of ICAR along with empowering all the scientists and administrators of NARS on state-of-the art technologies from time to time on agricultural research management. NAARM was established by the Indian Council of Agricultural Research (ICAR) at Hyderabad, in 1976, to address issues related to agricultural research and education management. With the motto ‘training for excellence’, the Academy is growing leaps and bounds even catering to the needs of developing NARS with its trained faculty members. With their experience and expertise gained over the years on different agriculture management areas, the faculty members are sought for consultancy services across the country. The Academy is also engaged in research to improve the utility and credibility of training programmes in the areas of agricultural research and education management. Besides, NAARM provides policy support in these areas to improve the efficiency and effectiveness of Indian NARS.

The Academy is located in the pollution-free sylvan environment of 50 hectares area in the premises of Acharya N.G. Ranga Agricultural University in Rajendranagar, Hyderabad. To facilitate the fusion of the mind with the function, the infrastructure developed esthetically over the years is of international standards ensuring the training of highest quality. The Academy is endowed with an excellent Library and Information Centre, state-of-the-art video production laboratory, Conference Hall, Seminar Hall, Committee Room, Scientist Home, Halls of Residence, Computer lab, Offset Printing Press and Health Centre. It is not the infrastructure alone, but each and every individual’s commitment, integrity, dedication and earnestness makes the Academy marching ahead.

Mission

To enhance the performance of NARS by building capacity in research and education policy, planning and management, and to foster a scientific culture that can make the NARS highly productive globally.
Mandate

NAARM is charged to fulfill the following mandate:

➢ To organize and conduct training programmes in agricultural research management for the scientists at various levels

➢ To build up high quality resource material in agricultural research management based on actual field experience

➢ To undertake systematic review and study of management problems of agricultural research institutes, programmes and systems

➢ To plan, organize and conduct workshops and seminars in research management and educational technology

➢ To organize, liaise and coordinate programmes of international cooperation in the field of agricultural research management

➢ To assist the State Agricultural Universities in developing Regional Centres of Management to cater to the needs on human resource development

Objectives

➢ To organize foundation courses for the scientists newly recruited into the Agricultural Research Service of ICAR

➢ To design and organize training programmes, workshops, and seminars, and to develop high quality material in agricultural research and education management for the senior and middle-level scientists of NARS

➢ To play a major role in different processes of human resource development of NARS, in the context of agricultural research and education

➢ To undertake policy-level studies on prioritization of research and resource allocation, and to enhance research productivity of the constituents of NARS and their programmes

➢ To evolve suitable management techniques for effective planning, scheduling, organizing, monitoring, and evaluation of agricultural research and development projects in NARS
To study the management issues of various programmes and patterns of technology transfer, develop effective systems and strategies for effective communication of agricultural technologies

To undertake development programmes for evolving more effective and efficient approaches, methods, and models in higher agricultural education for use in SAUs and Deemed Universities of ICAR

To promote and execute academic programmes of higher learning in the specialized areas of agricultural research and education management

To develop expertise in information technology to meet the application software needs of NARS

To undertake systematic review and to develop appropriate systems for efficient and effective administrative and financial management in NARS

To function as a repository of ideas and information in the form of databases in the field of agricultural research and education management, and to act as a clearing house for information dissemination through national and international networks in these areas

To offer consultancy services in the field of agricultural research and education management, and agricultural information and communication technology.

**Organization and Management**

The Academy is headed by the Director. The Director is assisted by two Joint Directors (currently one Joint Director is in position) and three Division Heads in the execution and implementation of various programmes. The Academy is organized into three functional divisions, viz. Agricultural Research Systems Management and Policies, Human Resource Management, and Information and Communication Management. The Institute Management Committee (IMC) guides and supports the Director by periodic review of programmes and approval of investments in new areas of research and education, training programmes, workshops and seminars. The Research Advisory Committee (RAC) and Staff Research Council (SRC) provide broad guidelines and assist in developing and implementing specific research programmes and projects.
NAARM ORGANOGRAM

Institute Management Committee

DIRECTOR

Research Advisory Committee

Joint Director (Training)  Joint Director (Research)

Agricultural Research Systems Management And Policies Division
- Agric. Research Mgmt.
- Research Project Mgmt.
- Agriculture Economics
- Rural Sociology

Human Resource Development Division
- Human Resource Mgmt.
- Educational Technology
- Educational Psychology

Information and Communication Management Division
- Computer Applications
- Agriculture Statistics
- Mass Communication
- Agricultural Extension

Centralized Services
- Hostel
- Health Centre
- Farm
- Maintenance
- Library
- Administration
- Finance
- Video Lab
- Press and Publications
- Transport
Human and Financial Resources

Human Resources (as on 31.03.2003)

<table>
<thead>
<tr>
<th>Category</th>
<th>Sanctioned Strength</th>
<th>Posts Filled</th>
<th>Vacant Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Res. Management Positions</td>
<td>03</td>
<td>02</td>
<td>01</td>
</tr>
<tr>
<td>2 Scientific</td>
<td>40</td>
<td>22</td>
<td>18</td>
</tr>
<tr>
<td>3 Technical</td>
<td>59</td>
<td>56</td>
<td>03</td>
</tr>
<tr>
<td>4 Administrative</td>
<td>46</td>
<td>44</td>
<td>02</td>
</tr>
<tr>
<td>5 Supporting</td>
<td>40</td>
<td>39</td>
<td>01</td>
</tr>
<tr>
<td>Total</td>
<td>188</td>
<td>163</td>
<td>25</td>
</tr>
</tbody>
</table>

Financial Resources (as on 31.03.2003)

The budget allocation and expenditure during 2002-03 are given in the following table. Information presented in the table below provides details on finances available from other sources and revenue generated during the period under report.

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Head</th>
<th>Budget allocation (Rs. in lakhs)</th>
<th>Expenditure (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-plan</td>
<td>Establishment Charges</td>
<td>270.40</td>
<td>247.80</td>
</tr>
<tr>
<td></td>
<td>Travelling Allowances</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>Other Charges</td>
<td>159.60</td>
<td>159.54</td>
</tr>
<tr>
<td></td>
<td>Works</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Sub-Total</td>
<td>433.00</td>
<td>410.34</td>
</tr>
<tr>
<td>Plan</td>
<td>Establishment Charges</td>
<td>35.00</td>
<td>24.90</td>
</tr>
<tr>
<td></td>
<td>Travelling Allowances</td>
<td>10.00</td>
<td>3.26</td>
</tr>
<tr>
<td></td>
<td>Other Charges</td>
<td>95.00</td>
<td>89.57</td>
</tr>
<tr>
<td></td>
<td>Works</td>
<td>110.00</td>
<td>110.00</td>
</tr>
<tr>
<td></td>
<td>Sub-Total</td>
<td>250.00</td>
<td>227.73</td>
</tr>
<tr>
<td>Other Sources</td>
<td>A.P.Cess</td>
<td>10.02</td>
<td>8.25</td>
</tr>
<tr>
<td></td>
<td>NATP</td>
<td>202.68</td>
<td>154.32</td>
</tr>
<tr>
<td></td>
<td>Sub-Total</td>
<td>212.70</td>
<td>162.57</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td>895.70</td>
<td>800.64</td>
</tr>
</tbody>
</table>
NAARM BUDGET (2002-03): NON-PLAN EXPENDITURE

NAARM BUDGET (2002-03): PLAN EXPENDITURE

Income Generation

(Rs. In lakhs)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Training</td>
<td>11.09</td>
</tr>
<tr>
<td>2</td>
<td>Consultancy</td>
<td>—</td>
</tr>
<tr>
<td>3</td>
<td>Sale of Books, Technology, etc.</td>
<td>0.06</td>
</tr>
<tr>
<td>4</td>
<td>Sale of Agril. Produces</td>
<td>1.01</td>
</tr>
<tr>
<td>5</td>
<td>a) Room rent / License Fee</td>
<td>5.94</td>
</tr>
<tr>
<td></td>
<td>b) Interest on Loans &amp; Advances</td>
<td>4.01</td>
</tr>
<tr>
<td></td>
<td>c) Leave salary / Pension consultancy</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>d) Miscellaneous Receipts</td>
<td>5.07</td>
</tr>
<tr>
<td>e)</td>
<td>Sub-total</td>
<td>15.07</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-Total of 1 - 5</strong></td>
<td>27.23</td>
</tr>
<tr>
<td>6</td>
<td>Interest on Short Term Deposits</td>
<td>7.63</td>
</tr>
<tr>
<td>7</td>
<td>Sale of Vehicles / Machinery</td>
<td>0.90</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-Total of 6 - 7</strong></td>
<td>8.53</td>
</tr>
<tr>
<td></td>
<td><strong>Total Receipts</strong></td>
<td>35.76</td>
</tr>
</tbody>
</table>
Training Achievements
Training Achievements

Imparting training in the broad area of agricultural research and education management is the key activity performed by NAARM. The brief outline of the variety of training programmes run at the Academy is as follows.

**Foundation Courses:** These programmes aim at improving the knowledge and skills of scientists and administrative staff at the entry level when they are inducted into the ICAR system. Programmes for the scientists focus on agricultural research management, whereas that for administrative and finance officers deal with administrative and finance management.

**Senior-Level / Refresher Courses:** For the benefit of the middle-level scientists and faculty members of ICAR and SAU systems, advanced programmes are conducted on various aspects related to agricultural research management, human resource management, and information and communication management. Some of these programmes are recognized by ICAR for the Career Advancement Scheme of scientists and faculty members.

**Management Development Programmes (MDP):** These are designed as per the managerial needs of the newly recruited Heads of Division, Project Co-ordinators and Zonal Co-ordinators.

**Executive Development Programmes (EDP):** Newly recruited Directors, Assistant Directors General, Joint Directors of National Institutions, who comprise the Research Management Position cadre of ICAR, participate in these Executive Development Programmes.

**Sponsored Programmes:** These packaged programmes are designed as per the needs and requirements of clients from both India and other developing countries.

**Distance Training Programmes:** To reach a wider audience, distance training programmes in Agricultural Research Management and Educational Technology are offered for developing the capacity of scientists and faculty members of remotely located research stations of ICAR and SAUs. Management of these programmes rests with the Distance Training Centre at the Academy.
Summer / Winter Schools: The Education Division of ICAR sponsors Summer/Winter Schools with a view to orient the scientists and teachers on the recent advances in the field of agriculture research and education management.

International Programmes: The Academy is being looked upon by the developing countries to provide training support for their human resource development in the areas of agricultural research and education management. The Academy has developed expertise and excellent facilities to cater to these increased demands from the NARS of various developing countries.

During the period under report, the Academy organized a total of 36 training programmes and trained 829 personnel belonging to scientific, technical and administrative cadres of National Agricultural Research System in India and some other developing countries.

Foundation Course

The FOCARS is the basic induction training imparted to all the newly recruited scientists to the agricultural research service. This four-month duration course is conducted in three specific phases namely, Phases I: Agricultural Research Systems and Management Processes - Concepts & Principles; Phase II: Field Experience Training and Phase III: Agricultural Research Systems and Management Processes - Practice and Applications. Phases I & III are organized at the Academy, and Phase II is conducted at the FET centres. The foundation course aim at exposing the participants to the various aspects of agricultural research project management, in addition to developing skills in them for managing their research by inculcating inter-disciplinary team spirit. Adequate opportunities were provided to the scientists to develop knowledge and skills in information technology, communication, organizational behaviour and administration and finance. This training also aims at developing a feeling of fraternity among the newly recruited scientists. Various topics included scenario analysis, research project management, organizational behaviour, individual and group behaviour, team building, computer applications & information management, technology transfer, educational technology including video production, administration and financial norms, and scientific communication. Twenty-three ARS probationers underwent foundation training. Drs M. M. Anwer, N. Sandhya Shenoy and R. V. S. Rao coordinated this FOCARS batch.
Refresher Courses

| Information Technology in Agriculture | The application of information technology (IT) is becoming increasingly prominent in agricultural research and management. The advent of the Internet has fundamentally altered the way in which work is carried out. Four programmes were organized to introduce emerging IT based agricultural technologies so that they can be absorbed into routine agricultural research and technology transfer. 121 scientists attended these courses. The concepts covered were Trends in IT, MS Office, statistical software, scientific communication, E-mail, GIS, MIS, e-commerce, Internet and Networking. First programme was coordinated by Drs N.H. Rao, M.N. Reddy; the second one is coordinated by Drs K.V.S. Rao and B.S. Sontakki; the third programme by Drs K. V.S. Rao and K.M. Reddy; and the last programme by Drs A. Gopalam and B.S. Sontakki. |
| June 12 - July 2, & | |
| July 31 - Aug.20, & | |
| Dec. 3 - 23, 2002 & | |
| Feb.5 - 25, 2003 & | |

| Agricultural Research Project Management | Two programmes were organized to equip the participants with knowledge and skills in various aspects of agricultural research project management. The topics covered were agricultural scenario, research project management, PRA techniques, information technology, scientific communication, and human resource management. The first programme was coordinated by Drs M.M. Anwer, D. Rama Rao and V.K.J. Rao where as the second programme was coordinated by Drs S.N. Saha and R. Kalpana Sastry. A total of 43 scientists from ICAR institutes and SAUs attended these programmes. |
| Sept. 18 - Oct. 8 & | |
| Nov. 6 -16, 2002 & | |

Senior Programmes

| Agricultural Research Prioritization Techniques | These programmes were organized with the objectives to familiarize the scientists with the various techniques used for prioritizing agricultural research projects and to share with them the practical experiences of priority setting at different levels. The content for this programme included need and importance of research prioritization, congruence method, domestic resource cost ratio method, checklist and scoring models, benefit–cost analysis, PRA tools, ICRA approach, decentralized research prioritization, SREP applications, etc. Drs B.S. Chandel and S.K. Soam coordinated this programme where 52 participants attended. |
| April 15-20 & | |
| Aug. 26-31, 2002 & | |

| Statistical Analysis for Socio-economic Research Data | To familiarize the statistical tools for socio-economic research data and to provide hands on practice on statistical software for the scientists working under NATP at NBSS&LUP, Nagapur a five-day programme was organized on request of the PI of the project. Under this training programme, statistical techniques in socio-economic research, regression analysis concepts, multivariate techniques, linear optimization etc. were covered along with adequate practice on software like SPSS & MS Excel. Drs K.V.S. Rao and M.N. Reddy were coordinators where four participants took part. |
| April 30-May 4, 2002 & | |
### Leadership and Personality Development
**June 10-15, 2002**

The programme was organized to explore the concept of leadership and ways in which leadership has been exercised in modern times and to undertake leadership roles in a variety of groups in order to practise and develop leadership skills. Personality exploration, typing, development, leadership theories, development, Indian perspective, etc. were covered in this training programme. Drs P. Manikandan and M.M. Anwer were the coordinators. Ten participants attended.

### Executive Development Programme in Agricultural Research Management
**June 14-18, 2002**

One programme was organized to provide a forum for the Directors of the ICAR institutes to discuss various research management issues confronting the effective functioning of the ICAR institutes. It gave an opportunity to the participating Directors to share their experiences based on individual case and specific situations. In addition, it exposed the participants to a few practical tools for solving research management problems. This programme was organized for the seven Directors of ICAR Institutes on discussions took place in institute management, general administration, HRD issues. Drs Jagannadham Challa and S.N. Saha coordinated this programme.

### Stress Management
**July 1-6, 2002**

Stress management is gaining more and more importance now-a-days, particularly in the organizational context. Scientific job is not a stress-free job. Scientists, on their work are exposed to tension, frustration and anxiety while executing their assigned duties. This programme gives an insight to the participants about the role of stress and coping mechanisms. It contains several instruments, exercises and case studies to measure the role-related stress of the individual scientists and also facilitates them to develop appropriate coping mechanisms and strategies. This programme was coordinated by Drs S. Shanmugam and P. Manikandan in which eight participants took part.

### Computer Applications for Administrative and Financial Management
**July 17-27, 2002**

Today computers are used extensively in many areas including administrative and financial activities and, thereby, playing an important role in human resource development for effective and efficient office functioning. Considering these facts this programme was organized to orient and sensitize personnel of administrative / financial wings of NARS in computer applications. The topics covered in this programme are basics of computers, word processing, spreadsheets, office automation, e-administration, and the finance software viz. ARFIS. This programme was coordinated by Drs K. Vidyasagar Rao, R. Kalpana Sastry and Mr S.K. Pathak. 46 participants attended this training programme.
This programme was organized to develop knowledge and skills of women scientists for managing their scientific activities and to provide required managerial skills to work effectively as leaders and members of different teams. Personality development, leadership, motivation, values and morals, management of finance, time, information and stress, effective communication, creativity and problem solving, managerial skills, brainstorming, SWOT analysis and organization development were the concepts covered for the nine women scientists under this programme. This programme was coordinated by Drs N. Sandhya Shenoy and R. Kalpana Sastry.

This programme was organized with the objective of developing an understanding and appreciation of the impact assessment of the agricultural R&D, as follow up measure. It dealt with various methods and tools of impact assessment. It was coordinated by Drs B.S. Chandel and S.K. Soam. Eleven participants were benefited from this training programme.

This programme was organized with an objective to design and develop web pages and web sites. Creating web pages, applying themes, formatting text, creating internal & external links, navigation bar, inserting and hyper linking images, creating and enhancing tables, adding web extras using the front page, FAQ, feedback, search were covered in this training programme. Dr N. Sandhya Shenoy and M. Narayana Reddy were the coordinators where nine participants attended.

Application of computers in agricultural research and development has become more relevant and important to-day than ever before. Every scientist in the National Agricultural Research System needs to possess the knowledge and skill in working with computers. The Academy offers training programmes in computer applications in agriculture to achieve this goal. The schedule in this programme includes concepts of windows, word processing, spreadsheets, DBMS, presentation techniques, statistical analysis, networks, and Multimedia. Drs K.M. Reddy and K. Vidyasagar Rao coordinated this programme. 13 participants attended this course.

This programme aimed at equipping the participants with necessary knowledge and skills in planning and production of educational video programmes. This programme is fully hands-on, and by the end of the programme the participants produced video programmes for use in educational programmes. Mr K.R. Prabhakar and Mr Ch. Janardhan Rao coordinated this training programme covering video technology, script-writing, studio and field production, video editing, etc. to the 17 participants.
### GIS Applications in Agricultural Research
**Nov. 20-30, 2002 & Feb. 18-27, 2003**

Realizing the growing applications of GIS in agricultural research, management and extension, two training programmes were organized to introduce the relevant definitions and concepts of geographical information systems and related technologies like remote sensing. These programmes covered concepts, vector and raster spatial data formats, digitization of maps, thematic mapping, spatial analysis, digital data entry, map overlays, preparation of thematic maps, applications. 23 participants attended these programmes on GIS, which were coordinated by Drs M. N. Reddy and N.H.Rao.

### Management Development Programme in Agricultural Research
**Nov. 21-27, 2002**

Management Development Programme was held in response to the felt need for organizing course in research management for the newly recruited heads of the divisions and project coordinators of ICAR institutes and headquarters. Drs Jagannadham Challa and R.V.S. Rao coordinated the MDP programme covering concepts like research management, HRD, administration and financial management, information and communication technology, where ten participants took part.

### Management Development Programme for Comptrollers of State Agricultural Universities
**Jan. 6-7, 2003**

This programme was specially and exclusively designed for the controllers of state agricultural universities. The concepts covered were Effective use of information technology, time management, stress management, change management, conflict management, organization behaviour and project management, etc. Dr S.N. Saha coordinated this MDP where 32 participants took part.

### Management Development Programme for Field Experience Training (FET) Coordinators
**Feb. 20-26, 2003**

Fourteen FET coordinators were orientated to FET and its methodology, human resource management, institution management, research project management, information and communication management, administrative and finance management during this MDP programme coordinated by Drs P. Manikandan, S. N. Saha and N Sandhya Shenoy.

### Advanced Course on Web Design
**March 24-29, 2003**

The course extensively covered web design and development, concepts of distance education and training, software tools for DET, project in web design, ICT application in agricultural research for 15 participants from ICAR institutes and SAUs. The coordinators were Drs M. Narayana Reddy and N. Sandhya Shenoy.
Off-campus Programmes

Retreat Programme for ICAR Executives at IIM, Ahmedabad
Sept. 6-8, 2002

An ‘Institutional Consultancy’ was sought in view of experience and expertise available with IIM, Ahmedabad in the specialized area of institution building through leadership development, to design and organize a Retreat Programme for the top executives of ICAR. The main objective was to sensitize to the macro economic transformations occurring in the global scenario with special emphasis on agriculture and to identify and understand the challenges confronted by ICAR in achieving its Vision 2020. Fourteen senior level officers of ICAR participated in the programme. NAARM faculty Drs J.C. Katyal, T. Balaguru, and Prof. Indira J. Parikh, IIM, Ahmedabad coordinated the programme.

Use of Statistical Software for Agricultural Data Analysis at Shillong
March 3-7, 2003

A five-day training programme on the “Use of Statistical Software for Agricultural Data Analysis” was organized for the research workers of Department of Agriculture, Meghalaya at Shillong. The participants were provided with basics on statistical methods and interpretation of experimental results and hands-on-practices on statistical softwares viz. MSTATC and MICROSTAT for agricultural data analysis. Twenty participants drawn from the three districts research stations including the headquarter officers involved in agricultural data analysis participated in this programme. Dr K. Vidyasagar Rao, NAARM coordinated the programme.

Faculty Development Programme on Educational Methodology and Instructional Technology at MAU, Pharbani
March 15-21, 2003

The Faculty Development Programme on Educational Methodology and Instructional Technology (EMIT) was organized at College of Veterinary and Animal Sciences, Parbhani (Maharashtra Animal and Fishery Sciences University). The programme was intended to provide conceptual understanding of EMIT philosophies for improving the quality of agricultural education and to provide an over view of Learning Teaching Testing and Evaluation by hands on experiences. Drs A. Gopalam and K.H. Rao were the programme coordinators. Drs S.N. Saha, Joint Director, P. Manikandan, Head, Division of HRD, D. Rama Rao, Head, Division of ICM; R. Kalpana Sastry, Sr Scientist, NAARM were facilitators of the programme. Forty nine members attended the programme.
At the request of the Government of Yemen and sponsored by the Food and Agriculture Organization, the second International programme on Agricultural Research Management for the Yemen scientist was organized. The programme was organized to develop an understanding of the various aspects of agricultural research management including research planning, prioritization and management, participatory approaches to technology development and management of funds, manpower and physical facilities and to develop basic skills in computers, information management and written, oral and video presentation and communication, required for professionals in agricultural research and development. The participant presented seminar on the conditions and requirements of Yemen, and also made video film of the agricultural scenario in Yemen. Dr N.H. Rao coordinated this training programme.
Workshops, Conferences, Meetings and Summer Schools

Workshop on Motivation Techniques

The ability to motivate is an important skill in human resources management. Motivation is an ingredient not found in the balance sheet of the organizations, yet it is extremely important to raise the self-esteem of people, create in them determination to perform and strive for higher output stretching their faculties to the utmost. The application of effective motivation techniques will have a profound effect on the output of organizations. To review the current relevant theories on motivation of knowledge workers, a workshop on Motivation Techniques was organized from April 8 to 10, 2002 at the Academy. Current theories of motivation, motivation techniques in use in ICAR institutes, action plans for their enhancement were covered. Drs M.M. Anwer, K. H. Rao, and R.V.S. Rao coordinated and two participants attended the workshop.

Workshop on Gahan Hindi Prashikshan

Two Workshops on Gahan Hindi Prashikshan were organized from June 18 to 22, 2002 and February 18 to 22, 2003 for the employees of ICAR headquarters and ICAR institutes, who are working in the sections other than Hindi. The major objectives of the workshops were to discuss about the experiential usage of Hindi. More stress was given on practical exercises in order to enable the participants to learn the use of Hindi in discharging their duties in Hindi.

The workshops exposed the participants to the official language implementation; responsibilities and expectations of Central Government Employees, different forms of correspondence, the difficulties faced by non-Hindi speaking employees in the implementation of Official Language Policy. Some tips to increase use of Hindi in the Central Government Offices etc. Total 96 members attended the workshops. The first workshop was coordinated by Dr A. Gopalam and Mr Pradeep Singh and the second workshop coordinated by Dr A. Gopalam and Ms. Renuka.

Workshop on Management of Agricultural Education

A three-day workshop on Management of Agricultural Education was organized from July 23 to 25, 2002 to discuss the key areas of agricultural education and to develop an understanding on the important entities of state agricultural education. It provides an organized platform and also an opportunity to the educational planners to enter into a dialogue and develop an insight into management parameters. This workshop also provides the participants to prepare action plans for the future improvement
of agricultural education. The individual case studies presented by the participants were also presented and discussed.

In the workshop number of emerging issues were put forward for discussion which include, competency of post-graduates to meet the national and international norms; developing competency of graduates and post graduates for entrepreneurship, self employment and excellence in professional occupancy; creating rural leadership for integrated rural development and environmental stability and creating adequate weightage to women power in agricultural education programmes and allied activities. Brief summary of the discussion is given below:

Agricultural universities will have to reorient its teaching, research and extension priorities to develop competent human resource, newer and modern agro technologies, suiting to the changing scenario of the state and follow innovative strategies to meet the challenges on farm front.

Fourteen Directors and Deans of Agricultural Universities participated in the workshop. Drs S.N. Saha and A. Gopalam coordinated the workshop.

**Workshop on Official Language Policy**

This workshop (Rajbhasha Kaaryanvayam: Prachar - Prasar aur Karyakshetra ke Parivash mei) was designed with a view to bring about awareness in Official Language Policy of Government of India, and also to impart the needed skills and practical knowledge to the personnel who are not part of the Hindi section. The workshop covered sketch on development of Official Language policy requirements and simplification of implementation, experiences of Hindi officers, lessons learnt. Dr A. Gopalam and Mr D. Venkateswarlu coordinated this workshop attended by 46 participants.

**National Conference on Distance Training**

The aim of the Indian National Agricultural Research System is to provide agricultural technologies for achieving the goals of rural development and poverty alleviation.

Scientists in many NARS institutions particularly those in remote locations have little or no access to the newly emerging global scenario under WTO regimen and training in targeting agricultural research to the user’s needs. This limits the contribution that their research efforts can make to sustainable development towards food security and alleviation of rural poverty. In-service training of researchers and research managers is one way of providing and improving the knowledge and skills required to them to effectively target research to the needs of rural poor.
Distance appears to be a potential option to “reach the un-reached” in research stations in rural areas and to provide in-service training opportunities in a more informal and open-ended manner with easy access to information and self-learning materials. Moreover, distance training is considered to be both cost effective and convenient. To this effect International Service for National Agricultural Research (ISNAR) and ICAR entered into a Memorandum of Understanding to carry out a research project on Distance Training for Agricultural Research Management. The project was undertaken jointly by NAARM and ISNAR in collaboration with Wye College, UK and Commonwealth of Learning (COL), Canada. The Adaptive Research phase was launched in June 2000 with the primary aim of developing a distance training module and implement in a pilot distance training programmes in the participating State Agricultural Universities. The distance-training module was specifically aimed at capacity building of scientists in agricultural research management targeting the rural resource poor farmers in particular. The preferred distance training strategy developed at the end of the Applied Research phase was adapted into a distance-training package on the theme of “focusing agricultural research on poverty alleviation”.

The entire experience of the Pilot Distance Training Programme was evaluated and was presented in the conference, which was held on November 7 and 8, 2002 as a case study. It was inaugurated by Dr. Mohan Kanda, IAS, Special Secretary, Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India, New Delhi. The follow action plan based on the outcome of the project was discussed in the Conference. Proposal for establishing a Distance Training Center at NAARM was developed and discussed. Dr Jagannadham Challa is the Principal Investigator of the project. Report is available on the Academy’s web site.

About 100 delegates attended the Conference including 10 Vice Chancellors and several Directors and retired eminent scientists, international project partners and scientists from the five participating SAUs viz. ANGRAU, Hyderabad; UAS, Dharwad; MPKV, Rahuri; TNAU, Coimbatore and TANUVAS, Chennai.

**National Workshop on Performance Assessment of Agricultural Research Organizations**

Since independence, the National Agricultural Research System (NARS) has made large investments in agricultural research. Basic capacity of the research organizations to perform technology generation and dissemination functions is mostly in place. In the light of economic
liberalization and globalization of agriculture enunciated by the Government, increasingly alarming resource crunch, structural adjustment, trend towards privatization of research, and the re-examination of public sector role in agricultural research have necessitated the policy makers and research managers to focus on the impact of research as well as on the accountability of research organizations. Like in private sector, the public sector research organizations are now frequently being asked to show results, improve their performance (in terms of output and impact) and enhance their accountability to an increasingly varied group of stakeholders and beneficiaries. They are called upon to generate outputs that are more acceptable; bring about greater impact in terms of increased production, productivity, profitability and sustainability; and are accountable to their clients.

Research organizations in the NARS are now confronted with the urgent need to demonstrate performance, accountability and results to sustain the support and funding from planners and administrators. This calls for more realistic performance-oriented evaluation systems, particularly at the organizational level. Such systems, if internalized, can be very valuable for the research managers to assess the level of performance of their research organizations, in terms of output and outcome; identify the management constraints, both internal and external; and evolve appropriate strategies to improve their performance. The existing performance assessment system (mostly external, as in the case of QRT) can be complemented by these procedures.

Under the aegis of National Agricultural Technology Project (NATP) Sub-project on Priority Setting, Project Monitoring and Evaluation (PME) jointly being implemented by NAARM, NCAP and IASRI, the Academy has been assigned with the responsibility of developing a more realistic performance assessment system which can be readily practised by the research organizations for self-assessment of their performance, on a continuing basis, and take appropriate action needed to overcome the operational constraints, both internal and external, towards realizing improved performance. In this context, a questionnaire survey was undertaken by NAARM, on the lines of experience gained by international agencies working with developing country NARS. It was planned to refine the methodological framework developed on the basis of information elicited from the senior level functionaries, both working and retired, in the NARS after critical examination in the Workshop, which was held on March 3rd and 4th, 2003 at the Academy.
Dr I.V. Subba Rao, Vice Chancellor, Acharya N.G. Ranga Agricultural University (ANGRAU), Hyderabad inaugurated the workshop. Dr M.V. Rao, Former Special Director General, ICAR, presided over the function. The workshop covered issues like agricultural production system, performance, accountability, organizational performance assessment system, output assessment, productivity, outcome assessment – impact, critical management elements, and constraints to effective management in which 35 delegates took active part. Drs T. Balaguru, R. Kalpana Sastry and R.V.S. Rao coordinated the workshop.

**Workshop on HRD Strategies for Organizational Effectiveness of NARS**

Human resource development of the large scientific community in the National Agricultural Research System (NARS) depends considerably upon appropriate manpower planning, developing and maintaining a cadre of well-trained development-oriented scientists, technicians and administrative and finance functionaries in appropriate disciplines and jobs. HRD in NARS is as indirect as it is complex since it is contingent upon several factors such as policies, infrastructure, organizational climate, work culture and attitudes. Professional competencies coupled with interpersonal relationships in multi-disciplinary groups are very crucial for the success of HRD initiatives. HRD as a management component is now projected with high profile visibility in all spheres of activities especially in agriculture considering the vast manpower and investments. The theme is nowadays for development and change and hence HRD has come under greater focus since the human capital is central to poverty alleviation effort and sustainable economic growth.

Agricultural research contributes to the advances in agricultural technologies, which have direct relevance to quantitative and qualitative agricultural production and poverty alleviation. Enhancing the productivity of scientists and staff is the main of this effort. HRD is a tool for management of change with a dynamic outlook since trained manpower in NARS requires a variety of competencies to perform different tasks and functions at any time, and also for coping with changes in the organization and environment. HRD is a philosophy of management for the future of Indian agriculture and the future generations. With this rationale the project of “HRD Strategies for Organizational Effectiveness of NARS” was carried out between June 1999 to May 2002 with funding from A. P. Cess of ICAR. The project aimed to develop management systems approach for enhancement of organizational effectiveness of the institutions of ICAR and SAUs. In the process a lot of relevant data and information on various HRD attributes
was generated. The strategies have been evolved from out of this study are expected to enhance research productivity and personnel development of individuals and groups in the system. The study used the output from personal interviews, brainstorming sessions, mini workshops, consultations, qualitative and quantitative survey through questionnaires, holistic data and dynamic analysis. Several ICAR institutes and SAUs were visited, several management experts were consulted, hundreds of scientists, officers and staff were interacted during the course of this project. A national workshop was organized on March 11th and 12th, 2003 to review and discuss various project outputs to develop systems approach for enhancement of organizational effectiveness of the institutions of NARS.

The Workshop was inaugurated by Dr S. A. H. Abidi, Member, ASRB, New Delhi and presided by Ms. Shashi Misra, Secretary, ICAR, New Delhi. The workshop deliberated on issues like agricultural research management practices and training needs, organizational culture and environment, scientist-administration interface, HRD needs of administrative and finance functionaries, training database on NARS, personality types of scientist and academicians of NARS, recommendations for NARS. The Plenary Session was chaired by Dr K. V. Raman, Former Director, NAARM. About 75 delegates from all over NARS participated in the workshop. Drs J Challa and K Vidyasagar Rao facilitated this workshop.

**Summer School on Recent Advances in Agricultural Research Project Management**

This Summer School was organized from April 15 to May 5, 2002 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. The programme was conducted with a theme for each of the three weeks. The first week focussed on the agricultural scenario - present and future, and also the trends in agriculture towards sustainability. The tools for technology forecasting and using these for research management was also enumerated. Against this background, the elements of project management cycle were taught and this culminated in the preparation of project using MS Project software. Two-day hands-on session was also held for this exercise and the participants presented their work to the faculty. The third week concentrated on the building of teams, consequent inter-personal relations and management of conflicts between teams. Sessions on writing of research proposals, new topics like labour management, WTA, IPR were also dealt. The participants were given exercises for preparing good scientific proposals and then the presentations were discussed to suggest improvement. Twenty-one scientists from ICAR institutes and SAUs attended the programme. Dr T. Balaguru was the Director of this Summer School. Drs S. Shanmugam, N. H. Rao, S.K. Nanda and S.K. Soam coordinated the programme.
Summer School on Recent Advances in Educational Methodology and Instructional Technology

A Summer School on educational methodology and instructional technology was organized from May 7 to 27, 2002 with a focus on teaching effectiveness and teaching excellence. The topics covered in the summer school included management of agricultural education, instructional technology an overview, brainstorming as a technique for learning teaching, motivation and demotivation in classroom instruction, instructional video an overview, web based learning theory and practice, presentation of posters as means of communication, communication strategies, classroom management, communication strategy for behavioural modification, participatory learning in agricultural education, strategies and options, management of financial resources etc.

Twenty-four Assistant and Associate Professors of State Agricultural Universities and Deemed to be Universities attended the programme. Dr A. Gopalam was the Director for this Summer School, whereas Drs P. Manikandan, M.M. Anwer, B.S. Sontakki and K.H. Rao were the coordinators.

Winter School on Advanced Course on Management of Human Resources in Agriculture

Winter School on Advanced Course on Management of Human Resources in Agriculture was organized from September 28 to October 8, 2002 to sensitize agricultural professionals on issues of human resource management in the organization and to expose the participants to the theories and practices of human behaviour in agricultural research and education environment for in-depth understanding of the individual, the group and the organizational behaviour. The topics covered in the winter school included overview of human resource management, foundation of individual behaviour, timing and sequence of events in training management, empowerment, E-mail and Internet for effective HRM, perceptions and individual decision making, self motivation, motivating others and organizational motivation, operationalising values and value systems in NARS, education as a tool of HRM, management of creativity, personality analysis, performance appraisal, group dynamics, editing and production of journals, effective communication, training needs assessment.

Twenty-five senior scientists of ICAR institutes and SAUs attended the programme. Dr M.M. Anwer was Director for this Winter School and Dr P. Manikandan was the Dean, whereas Drs K.H. Rao, B.S. Sontakki and R.V.S. Rao were the coordinators.
Meeting on Reforms

A meeting of the officers of combined cadre of administrative and finance and accounts officers from the institutes located in southern part of the country was held at the Academy on August 29, 2002 under the Chairmanship of Secretary, ICAR. The purpose of holding the meeting was to have an interaction with the officers in this cadre to know their problems and solicit their suggestions for smooth functioning of the organization. Thirty-two members attended the meeting.

Management Committee Meeting

XXXVI Meeting of NAARM Management Committee was held at the Academy on January 10, 2003. Dr B.N. Mathur, Director, NAARM; Dr I.V. Subba Rao, Vice Chancellor, ANGRAU, Hyderabad; Dr H.S. Nainawatee, ADG (HRD.II), ICAR; Shri N.K. Narasimha Rao, Commissioner, APARD; Dr B. Mishra, Project Director, DRR; Mr Jitender Kumar Singh, Sahjadpur, Punarkh (PS) Bihar; 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, Chief Administrative Officer and Mr S.K. Pathak, Finance & Accounts Officer, NAARM, attended the meeting. The committee perused the training programmes organized during the period from November 2001 to December 2002. The committee suggested that the content of the FOCARS should be changed in order to make the scientists become entrepreneurs, and the Academy should develop programmes specifically to be designed for SAUs and the programme on training the trainers. In view of the distance training activities the committee recommends to host the Academy’s web site from internet service providers gateway.

Hindi Fortnight Celebrations

Hindi fortnight celebrations were organized at the Academy from September 2 to 16, 2002 with a view to bring about an awareness about the official language and to create an environment congenial for the use of Hindi for official purposes among the staff and officers of the Academy. Several competitions like essay writing, typing, elocution, translation of words, speaking for one minute, memory competition, dictation, noting and drafting, general knowledge etc. in Hindi were organized. Dr A. Gopalam, Officer-in-Charge (Hindi) presented a report on the achievements of Hindi Unit during the year 2001. Dr S.N. Saha, Incharge Director and Chairman of the Official Language Implementation Committee of the Academy distributed the prizes to the winners of various competitions.
NAARM Silver Jubilee – Foundation Day Celebrations

Marking the 25 years of its establishment, the Academy organized a National Seminar on “Management – A Key for Improved Performance” as a part of Silver Jubilee Foundation Day Celebrations on September 1, 2002.

Padmasree Dr M.V. Rao, Former Special Director General, Indian Council of Agricultural Research (ICAR) chaired the Seminar. Speaking on the occasion Dr Rao said the agriculture is the very backbone of our livelihood and our national sovereignty. The national and international developments, in the last two decades have lead to a sea change in the agricultural sector, mainly due to research and developmental activities. It is time that we recognize the winds of change sweeping globally and decide to change our outlook, way of thinking, and working accordingly. Change, we must, but change is difficult. However, change is essential to make India a developed nation through agriculture. In order to accomplish this goal, the immediate task before us is to (I) ensure access to food for all keeping in view the population explosion (ii) enhance farm productivity and profitability by improvising of various production systems (iii) address effectively the second generation problems of ‘Green Revolution’ and also generate new resources without affecting the creativity and growth of science. He wanted NAARM to move with appropriate change to ensure academic excellence and strive for overall personality development of agricultural scientists in the ICAR system.

Speaking on Human values and spirituality Swami Srikantananda, Director, Vivekananda Institute of Human Excellence, Hyderabad said that harmonious growth of the physical, the mental, the intellectual and the spiritual dimension is essential for the all-round development of personality. Struggle for perfection in all these aspects will ultimately lead to the development of the real personality. Once we succeed in doing that, there will be a tremendous qualitative change in lives. He advised the scientists to work with team spirit for greater significant achievement of human welfare. The development of modern science and technology should be used to bring happiness and welfare to the mankind, he added.

Speaking on Role of NAARM for Sate Agricultural Universities Padmasree Dr I.V. Subba Rao, Vice-Chancellor, Acharya N.G. Ranga Agricultural University, Hyderabad said that universities are the centres for bringing economic benefits to the farming community, which need to percolate to the poorest of the poor. He stressed on importance of NAARM to provide training to the teachers in instructional technology, behavioural technology, video technology and leadership to face the challenges posed by an increasingly technology driven world.
Speaking on NAARM’s role in HRD, Dr J.C. Katyal, Deputy Director General (Edn), ICAR, New Delhi said that the Indian agriculture is taking challenges of sustainability and globalization along with a target of doubling the agricultural production. India can bank upon its vast human resources to successfully meet the above challenge. Keeping in view of observations / guidance provided by experts, Planning Commission, NAARM need to reorient and initiate new activities for changing agricultural research and education scenario in the country.

Speaking on Improving Management Capabilities Professor K. Ramachandran, Indian School of Business, Hyderabad stressed the need to identify target customer groups and activities to accomplish the mission. When the organization offering the training programmes the quality of the material and the blend of Attitude, Skill and Knowledge of the programmers play a great role in the success of the programme.

Dr M.V. Rao released the publication “Souvenir” brought out by the Academy on this occasion. Dr J.C. Katyal, released the Annual Report and Occasional Papers; Dr M. Rajagopalan, Former Director, NAARM released the Training Achievements book; Dr K.V. Raman, Former Director, NAARM released Directory of FOCARS Participants and Project Report - FSR in India: Case Study; and Dr C. Prasad, Former Director, NAARM released Directory of FET Centres.

**Kissan Samman Diwas**

The Academy participated in Kissan Samman Diwas organized by Indian Agricultural Research Institute (IARI) at New Delhi from December 21 to 23, 2002 and displayed various material like Video cassettes, CDs, publications, posters and photographs for the benefit of the farmers and visitors. Large influx of farmers and other stakeholders visited the stalls, video section and computer section. Several VIPs like Hon’ble Union Minister of Agriculture Shri Ajit Singh; Hon’ble Union Minister of State for Agriculture, Shri Hukumdeo Narayan Yadav. Hon’ble Minister of Labour, Shri Sahib Singh Verma addressed the gathering on December 23, 2002.
# Feedback

## Programme Feedback

### FOCARS
- Overall content and organization of the programme very good and useful
- Skills gained in specific areas for becoming a better researcher
- Need to reduce the number of theoretical lectures
- Visits to more institutes need to be arranged
- More time needed for computer practicals

### Senior Programmes
- Quality resource material was supplied
- Acquisition of new knowledge and skills
- Good exposure to different areas
- Individual computers to each participant needed
- Need improvement and update the materials
- New advanced packages are not included
- More time needed for practical classes
- Case study exercises to be included
- Need video shows on relevant topics
- Still more hands-on experience needed
- Duration may be increased
- Opportunities to be given to participants for making presentation of their case materials

### Refresher Courses
- Course content, modus operandi, and practical utility of the programmes satisfactory
- Useful and good study material provided
- Impressive method of teaching
- More case studies and exercises need to be included to ensure variety
- Resource material of guest speakers are not provided
- Need for more study visits to institutions in and around
- Presentation of some topics needs improvement
- Need to provide additional training material like publications etc.
- Case studies for Indian context and success stories need to be incorporated
- Yoga should be introduced daily and not only two days in a week.

### Summer / Winter Schools
- Relevant to the needs
- Provided a forum for sharing information on topical issues
- Timeliness and useful
- Structured presentation by participants as case studies need to be included
Research Achievements
Research Achievements

The Academy undertakes focused research in the areas of agricultural research and education management, agricultural policy, research project management, transfer of technology, human resources development and information technology. These are primarily meant to serve as input for various training programmes and workshops organized at the Academy. The management problems encountered by the ICAR institutes and the agricultural universities form the basis for undertaking such research. Besides, some policy issues requiring attention of research planners and administrators for the effective implementation of various agricultural programmes are also considered while formulating research projects. Funding for some of the projects is through AP Cess, DFID and NATP. A list of the projects carried out during 2002-03 is detailed below:

<table>
<thead>
<tr>
<th>S.No</th>
<th>Project Title</th>
<th>Funded by</th>
<th>Investigators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Management parameters of state agricultural universities and emerging policy issues and implications</td>
<td>A.P. Cess</td>
<td>A.Gopalam, S.N. Saha</td>
</tr>
<tr>
<td>2</td>
<td>Developing instructional modules for gender in agriculture curriculum</td>
<td>A.P. Cess</td>
<td>A.Gopalam, S.N. Saha</td>
</tr>
<tr>
<td>3</td>
<td>HRD strategies for organizational effectiveness of NARS</td>
<td>A.P. Cess</td>
<td>Jagannadham Challa, K. Vidyasagar Rao</td>
</tr>
<tr>
<td>4</td>
<td>Research priority setting at micro level</td>
<td>NATP</td>
<td>B. S. Chandel, N. Sandhya Shenoy, S. K. Soam, V. K. J. Rao &amp; B. S. Sontakki</td>
</tr>
<tr>
<td>5</td>
<td>Performance assessment and accountability enhancement of Indian NAROs</td>
<td>NATP</td>
<td>T. Balaguru R. Kalpana Sastry, R.V.S. Rao</td>
</tr>
<tr>
<td>6</td>
<td>Forecasting trained agricultural manpower</td>
<td>NATP</td>
<td>D. Rama Rao, S. Shanmugam &amp; S.K. Nanda</td>
</tr>
<tr>
<td>7</td>
<td>Development of computer mediated courseware for facilitating learning – teaching</td>
<td>NATP</td>
<td>A.Gopalam, K.M. Reddy</td>
</tr>
<tr>
<td>10</td>
<td>Distance training for agricultural research management (In collaboration with ISNAR, COL &amp; Wye College)</td>
<td>DFID</td>
<td>Jagannadham Challa, Dr. Byron Mook, ISNAR</td>
</tr>
<tr>
<td>11</td>
<td>Impact assessment of oilseed research in India</td>
<td>NAARM</td>
<td>B.S. Chandel</td>
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<tr>
<td>12</td>
<td>Role of government organization and non government organization run Krishi Vigyan Kendras in agricultural development with respect to A.P.</td>
<td>NAARM</td>
<td>N. Sandhya Shenoy, K. Vidyasagar Rao</td>
</tr>
<tr>
<td>13</td>
<td>Research project management in NARS</td>
<td>NAARM</td>
<td>P. Manikandan, T. Balaguru &amp; S.N. Saha</td>
</tr>
</tbody>
</table>
Major Research Accomplishments

Major activities and accomplishments of the projects during the year 2002-03 are briefly given below.

1. Management parameters of State Agricultural Universities and emerging policy issues and implications

Objectives:

- To study the ICAR model act and its implications in various agricultural universities.
- To probe into the acts, statutes and functioning of management bodies of SAUs.
- To ascertain the organizational structure of universities and their physical development.
- To investigate the integrated function of teaching, research and extension within the universities, and allied institutions within the state and the state departments of agriculture.
- To outline the course credit and internal assessment systems in various agricultural universities.
- To review investment pattern in SAUs and the outcomes.
- To scrutinize the recruitment and staffing pattern vis-à-vis the load of work and the outcome.
- To understand the planning, monitoring and evaluation mechanisms in the SAUs.
- To specify recommendations as a result of the above eight objectives and enlist the policy resulting out of this study.

Progress:

The project outcome and results were discussed in a workshop on Management of Agricultural Education, which was held on July 23 to 25, 2002. The organizational set up of different universities was presented for meeting the mandatory requirements of agricultural education. The project further dealt with suggested improvements for strengthening the agricultural research, education and extension.

2. Developing instructional modules for gender in agriculture curriculum

Objectives:

- Develop basic course materials for roles, factors affecting gender roles, historical trends, gender in time, knowledge/skills, gender resource management, impact of gender resource management, impact of gender systems, trends in development, future thrusts
Develop mechanism for converting basic course materials into print media and then reorient it to computer and video based instructional modules
Integration and complimentary role of machine mediated instruction to print media and class room instruction
Validate the developed course materials by off courses expect intervention and also by a site adaptability.

Progress:

It is proposed to use the instructional resource modules as courseware in Under Graduate instruction and thereby sensitize on the gender role in agriculture after initial validation and testing. The developed instructional modules will have the components for which adequate research work is contemplated.

Six modules on the areas on different gender related issues is broadly divided into seven categories viz. Gender for development, Gender roles in agriculture, Gender in time and labour use, Gender in knowledge/skill, Gender and resource management, Impact of Gender systems, trends in development and their gender impact. Software CD is being prepared entitled AGENDA (Aggregated Gender Dimensions Assessment)

3. HRD strategies for organizational effectiveness of NARS

Objectives:

➢ To develop management systems approach for enhancement of organizational effectiveness.
➢ To develop and standardize case models for selected institutions for research productivity and personnel development of individuals.

Progress:

The project aimed to develop management systems approach for enhancement of organizational effectiveness of the institutions of ICAR and SAUs. In the process a lot of relevant data and information on various HRD attributes was generated. The strategies have been evolved from out of this study are expected to enhance research productivity and personnel development of individuals and groups in the system. The study used the output from personal interviews, brainstorming sessions, mini workshops, consultations, qualitative and quantitative survey through questionnaires, holistic data and dynamic analysis. Several ICAR institutes and SAUs were visited, several management experts were consulted, and hundreds of scientists, officers and staff were interacted
during the course of this project. The project was completed on May 31, 2002. The Project Report was released in the National Workshop on HRD Strategies for Organizational Effectiveness of NARS held on March 11 and 12, 2003. Some of the salient findings and strategies based on the synthesis are given below.

- The most important aspects of research management for organizational effectiveness as perceived by the scientists are “management of human resources”, “resource mobilization”, “infrastructure development”, and “research planning, project development and implementation”. The most important skills required to be a successful research manager are “managing people at work”, “administration” and “supervision and monitoring”. The important changes need to be brought into management practices are “humanizing the environment in organizations”, “professional management approach” and “visibility with outside agencies”.

- The foremost recommendations are to provide more delegation of powers at all levels to decentralize the function of management, ICAR to develop its own administrative and financial rules to avail full functional autonomy, introduce project based budgeting and accountability through five yearly assessment target in research output, reduce the administrative procedures and channels, objective assessment of scientists and staff annually, introduce contract system of appointments for all cadres, change the system of interviews at ASRB, restore the old concept of ARS, and provide welfare facilities for women.

- The personality type analysis of scientists of NARS reveals that there is need for training in personality development on the lines of neuro linguistic programmes (NLP), need for enhancing creativity among the rank and file of scientists and academicians, aptitude tests may be introduced at the entry level of scientists and introduce personality development in course curricula of UG and PG programmes.

- A comprehensive quantitative analysis on the HRD requirements of administrative and finance functionaries of ICAR was carried out and the most salient findings and recommendations are as follows:
  - Compulsory training at the entry level for all staff and refresher courses once in three years.
  - Officers and staff may be encouraged to attend job-related seminars and conferences to develop their perspectives.
  - Need Evaluation Factors (NEF) for a variety of office functions were statistically calculated based on functional requirement, difficulties encountered, supervisors’ choice of training and choice of Heads of Office. Accordingly, based on the NEF values
obtained the training areas were classified on Compulsory, Vital, Essential and Desirable for the administrative and finance functionaries of ICAR.

- A new concept of scientist administration-finance interface for agricultural research has been proposed for effective integration of the three wings and optimum performance. The most inherent features of this interface are decision-making processes, attitudinal changes, role perceptions, opinions, prejudices and role expectations of the three wings of research management. System barriers at organizational level and institute level were identified and several ideas and solutions have been proposed in manpower utilization, HRD and functional areas.

- Organizational culture factors were obtained from scientists for a variety of activities and functions of research management. Accordingly, the following activities and functions have been shown in very poor light in the institutes.
  - Delegation of powers, Bottom up planning and functioning, Project based budgeting, “Refer to the council” approach, Perspective planning, Communication of information and transparency, Decision-making processes and general administration of institutes.

- Management Assessment Factors were obtained from administrative and finance officers of ICAR institutes for a variety of management functions of institutes. Accordingly the following functions require professional improvement in general.
  - Internal training programmes for staff, Catering to the needs of women cell, HRD activities for staff, Collective diagnosis and problem solving approach, Regular interface meetings, Internal auditing, Periodic internal institute review, Periodic review of resources, Social welfare activities.

- The most important aspects for effective interface are management style of institutes, attitudes to each other and work, role perceptions, role expectations, ignorance and finally the concept of a learning organization.

The following research management functions need to be addressed very sincerely for improvement in effectiveness of the institutes.

- Internal seminars of research, Adoption/impact studies, Economic cost benefit analysis, External institute reviews, Review of research proposals at the division/station level, On-
farm evaluation of technologies, Research programme planning meetings, Field visits reporting.

- Agricultural research management competency needs have been assessed and a variety of knowledge and skill components required at all levels of scientists and at senior level have been identified based on the responses of scientists of NARS. These need to be included as training inputs with comprehensive preparation and planning. For example, managing research, team building and dynamics, interpersonal relationships, personality development, communication skills, consulting and partnership skills, time management etc. are required for all levels of scientists.

For functional autonomy, ICAR should develop its own administrative and financial rules and develop purchase procedures for speedy procurement as suitable to agricultural research and more delegation of powers to decentralize the institutes under ICAR for less dependence on the headquarters. Various issues that are relevant to organizational autonomy of ICAR have been highlighted.

4. **Research priority setting at Micro Level**

Objectives:

- To develop appropriate research priority setting methods at the micro level
- To train the scientists in micro-level priority setting

Progress:

- By utilizing the resource material developed by NAARM, two training programmes of one-week duration were organized during April 15 - 20 and August 26 - 31, 2002 which were attended by 55 scientists from ICAR Institutes and SAUs.
- Training manual developed for using resource material in training programmes.
- Research study on Prioritization of production constraints at fishing in coastal agro eco zone in progress.

5. **Performance assessment and accountability enhancement of Indian NAROs**

Objectives:

- To build NAARM's capacity in the area of organizational performance assessment and accountability enhancement
- To introduce innovative organizational performance assessment methods and processes for improving the performance of research institutions in ICAR
Progress:

On the basis of interaction and consultation that the Academy’s faculty had with international agencies working with developing country NARS, a methodological framework for assessing the performance of agricultural research organizations has been developed. In order to elicit information on various parameters for assessing the performance of agricultural research organizations, a questionnaire survey was carried out. The requisite information was collected from senior level functionaries, both in service and retired from ICAR institutes and SAUs. Significant number of senior officers (30%) responded to the questionnaire and very valuable information was received from them. With a view to further refining the performance assessment methodology by critically examining the basic methodological framework already developed in conjunction with the response received through the questionnaire survey, a National Workshop on “Performance Assessment of Agricultural Research Organizations” was organized at NAARM, Hyderabad, for two days on March 3 and 4, 2003.

6. **Forecasting trained agricultural manpower**

Objectives:

- To design training programmes to forecast manpower needs in agriculture
- To provide policy guidelines for planning agricultural education so as to develop needed manpower in different occupations.

Progress:

- Five different questionnaires were developed and mailed to seek information on students, profiles of employing organizations, postgraduate students and senior executives perceptions on agri-education and universities plans on revamping education.
- List of under-graduates passed out from various agricultural universities in 1991 was obtained. Efforts are made to reach the graduates and a database of these graduates was continuously updated following snowball technique.

7. **Development of computer mediated courseware for effective learning - teaching**

Objectives:

- To develop interactive learning modules in various agricultural subjects
- To develop educational technology learning modules for use in distance education
Progress:

Various high-end software like Flash and Director were tested for the production of instructional materials. Flash animation protocols were tried for providing simulation. Director software was tried which accommodates simulation and variety of animation sequences. The same software will now tried for agricultural science subjects and the efficacy will be worked out. The effect of coupling various video segments in the Pinnacle system and the Director will be further studied. The instructional modules on Gender will be further improved by adding special effects created in Director.

8. **Capacity building of NARS in developing decision support system using GIS**

Objectives:

- To establish GIS Lab at NAARM
- To develop GIS base decision support system (DSS) for sustainable management of agricultural resources.
- To use the DSS as training tools for the scientists of NARS

Progress:

- Developed GIS training laboratory
- District level Database of agricultural production and resources updated for all districts of AP to 2000.
- State level database NAARM-AGRISTAT developed earlier is updated.
- Two maps – agroecological sub regions of India, and the states of India were digitized using ARCGIS.
- Spatial information systems for sustainability indicators are being developed at district level for AP State.
- A RICE GIS was developed for Andhra Pradesh by digitizing the State and agroecological subregions maps in ARCGIS and linking them with the district databases for rice area and production. A complete case study project with detailed instruction manuals has been developed for training in ARCGIS.
- Work on development of Spatial Information System on Indian Agriculture (AgSIS) has been initiated using the above maps and the state level database (NAARM-AGRISTAT) by integrating the maps and databases in MapObjects
- Two training programmes of 10 days duration on GIS applications in agriculture were organized

9. **Development of virtual campus for agricultural research and education management**

Objectives:

- To provide opportunities for scientists of NARS, to learn and contribute
to Agricultural Research and Education Management

- To provide accessibility to the scientists to get the management training at any time and anywhere without disturbing their work schedules
- To cover more number of scientists in less time and money
- To make use of contemporary information technology tools for effective and interactive training on internet

Progress:

- Developed Virtual Learning Centre (VLC) on the NAARM intranet (http://naarmweb.naarm.ernet.in)
- Homepage designed for the virtual learning centre providing easy access to the course modules. Finalized the overall structure for delivery of different course modules. Three modules on Research Project Management; GIS and HRM were developed and implemented on the web site of the VLC for the benefit of trainees and NAARM faculty.
- Interactive Course modules on GIS concepts and use of GIS software viz. Geomedia and ARCGIS developed for the VLC.

10. **Distance training for agricultural research management**

Objectives:

The higher-level objective of this project is to enhance the contribution of National Agricultural Research for Sustainable Rural Development leading to the Alleviation of Rural Poverty in India. Poverty Alleviation is a National priority for India and a commitment of the CGIAR.

Progress:

The third meeting of the Project Advisory Group was convened on May 18, 2002 to discuss the progress of the Adaptive Research. The National Conference on Distance Training for Agricultural Research Management was held on November 7 and 8, 2002. It was inaugurated by Dr. Mohan Kanda, IAS, Special Secretary, Govt. of India. About 100 delegates attended the Conference including 10 VCs and several Directors and retired eminent scientists, international project partners and scientists from the five participating SAUs (ANGRAU, Hyderabad; UAS, Dharwad; MPKV, Rahuri; TNAU, Coimbatore, and TANUVAS, Chennai). The Adaptive Research Report was released in the National Conference. The redesigned Distance Training Strategy evolved has the following key features:

The preferred distance training strategy developed at the end of the Applied Research phase was adapted into a distance-training package on the theme of “focusing agricultural research on poverty alleviation”.
The training module was developed as an interactive print-based training package with e-mail and other communication channels for interactivity between the learners and NAARM with no face-to-face contact sessions at all. The training module was designed as a 16-week course to be completed in a period of five months between November 2001 and March 2002. The most important feature of the pilot distance training programme was that the training was designed for group learning, experiential learning, interactive learning and peer learning with hands-on experiences through group exercises, individual exercises, field surveys, group seminars, report writing and research project proposal writing. Informative reading handouts were included exclusively for self-learning as a prelude to practical field exercises.

A support system consisting of Nodal Officers and Site Coordinators and the required logistical support was put in place, in consultation with the authorities of the five SAUs. 14 learning sites were selected in ANGRAU, MPKV, UAS-D, TNAU and TANUVAS representing Andhra Pradesh, Maharashtra, Karnataka and Tamil Nadu states. As per the preferred strategy, a group of five scientists were selected as learners at each learning site, a total of 70 learners in all to undergo the Pilot Distance Training Programme (PDTP) in a case study approach.

The monitoring of the programme was carried out by NAARM project team through periodic visits to the learning sites and record data and feedback on each leaning activity and qualitatively assess the progress of the learning. Towards the end of the course the learners were encouraged to evaluate the pilot distance training programme anonymously to obtain free and frank feedback and assessment of the learners' perception on the pilot distance training programme. The third meeting of the Project Advisory Group was convened in May 2002 to present and discuss the progress of the Adaptive Research phase and the pilot distance-training programme.

The average time taken to successfully complete the pilot distance-training programme was 27 weeks as against the planned period of 21 weeks. All the groups of learners at the learning sites produced three documents with new information collected through field surveys viz., *technology impact assessment on resource poor farmers (RPF), technology and information needs of the resource poor farmers and a research project proposal focusing agricultural research on poverty alleviation*. The research project proposals produced were of multi-disciplinary in nature with a focus on poverty alleviation with a variety of ideas and plans for their respective areas of agro-climatic zones.

Most of the groups of learners enjoyed the freedom to learn at their own pace while on their respective jobs and do things as per their own choice in groups. 60 per cent of the exercise responses, assignments and documents produced are of high quality. While some groups interacted
with NAARM through e-mail regularly, some groups did not interact at all with NAARM. About one-third of the learners did not have personal e-mail ID at all. According to the learners’ perception, collaborative learning and experiential learning are the highlights of the whole experience. The qualitative assessment of the learners’ progress was carried out from time to time during the monitoring visits of the learning sites. Majority of the learners have performed from ‘Good to Excellent’ in various exercises and assignments. However, it was also observed that a significant number of learners did not fill their respective manuals with their responses to the questions and other exercises and assignments. The learners were also encouraged to self-evaluate themselves for each unit of activities. A very high percentage of learners have rated their performance as ‘Good to Excellent’ with regard to various group processes and overall learning experience. According to the learners the most important topics of learning were: time management, working in groups, impact of agricultural research on RPF, methodology for impact assessment survey, understanding the problems of RPF, holistic approach to poverty alleviation through agricultural research, PRA techniques, village seminar, concept note writing, log frame technique and writing of a winning research proposal.

The learners were also encouraged to evaluate the entire PDTP anonymously. According to the learners, the objectives of the PDTP, learning activities and the learning outcomes deserved an achievement rating of 70 to 83 per cent. The feedback on the general organization of the course, logistics does indicate a variety of responses, which have been considered for the redesigned distance strategy. The individual benefits for the learners from the PDTP have been rated between ‘to Some Extent’ to ‘Great Extent’ by a majority of the learners. However, the learners appreciated that the new knowledge on RPF was the biggest gain followed by project preparation skills and project management skills. The skills and knowledge gained by the learners have been listed in the main text. Based on the feedback the learners are of the opinion that the time structuring for the course should be increased, the season for the course may be altered, more financial resources may be provided and include more practical exercises and reduce the reading handouts.

The learning outcomes produced by the learners in the form of documents have also been evaluated. Most of the documents produced by the learners contain a lot of new information, which is of great value to the respective universities for research and extension activities. Majority of the research project proposals written by the learners are of multi-disciplinary in nature with new ideas for focusing agricultural research on poverty alleviation. Most of the 14 projects generated are proposed for AP Cess scheme of ICAR.

Based on the experience gained and the feedback obtained and evaluation on the PDTP a revised distance training strategy is proposed.
for future sustenance of such programmes in the Indian NARS. The DT programmes are certainly cost effective compared to *in situ* training programmes of NAARM, which are of either institute proposed or sponsored in nature. The proposed revised DT strategy has the following key features:

- Group learning will be the key emphasis for all DT programmes in agricultural research management
- Experiential mode of learning to be the prime philosophy in an action-learning process
- Selective use of ICT starting with print-based training manuals with gradual integration of IT developments
- The appropriate season for such DT programmes would be from August to January with 6 months of part-time on-the-job non-formal training without exceeding 15 per cent of learners’ workload
- DT programmes need to be recognized as refresher courses in career advancement scheme of scientists to give effective patronage for the sustenance and success of DT programmes
- A consortium of NARS institutions, NAARM and Open Universities is proposed for planning, development of DT programmes
- NAARM will basically play the role of a consulting agency for content development, design, production and delivery of DT programmes
- Regional Nodal centers need to be created in NARS institutions for effective implementation and monitoring of programmes
- Sponsoring of DT programmes to be from the NARS institutions in terms of resources and support system

The project was finally completed and closed w.e.f. December 30, 2002. The necessary reports and Audit Utilization Certificate have been submitted to ISNAR by March 2003.

11. Impact assessment of oilseed research in India

Objectives:

- To estimate change in productivity and cost structure of oilseed crops
- To determine contribution of research and policy support to oilseeds productivity
- To evaluate return to investment of oilseed research in major oilseed crops in India.

Progress:

Preliminary results compiled. During last three decades, the yield has contributed 45 per cent in increase of total oilseeds production. This is the result of research investment, which increased at a growth rate of 6.4 percent during 80s and 90s. The total factor productivity is the another
measure of impact of research investment. It was observed that TFP grew in case of rapeseed, mustard, groundnut, and sunflower. While it decreased in case of soyabean, sesame and safflower.

12. **Role of government and non-government organization run Krishi Vigyan Kendras in agricultural development with respect to A.P.**

**Objectives**

- To study, compare and assess the selected Organizational, Workgroup, and Job involvement variables and roles performed in agricultural development by the GO and NGO KVKs
- To find the expectations of the clientele groups of the GO and NGO KVKs in view of changing agricultural scenario
- To find the inter-institutional linkage patterns among the NGO KVKs and other line departments, their expectations, operational constraints and suggestions for meaningful collaboration.

**Progress:**

- A sample of 30 comprising In charges of training centres, staff, farm women and men, and farm youth were selected at each KVK
- The data from 6 KVKs (3 GO KVKs and 3 NGO KVKs) from three regions viz., Telangana, Coastal and Rayalaseem were collected. The compilation and the analysis of data was over.
- The preparation of report is in progress

13. **Research project management in NARS**

**Objectives**

- To study the system of research project management in NARS
- To suggest a comprehensive system of project management

**Progress:**

- The information on the management of research project, through three different questionnaires from Heads of Divisions, Scientists and in-charges of Technical Cell were collected from ICAR institutes and SAUs. The information collected is being compiled
Gender Issues and Empowerment of Women in Agriculture

Introduction

The agriculture economy in India has succeeded in laying the foundations for sustainability in agricultural development, which not only envelops food sufficiency but also encompasses the strategy for over all development of agriculture. Incidentally, it may not be out of place to mention here that the technology of extension from laboratory to land in agriculture sector is more than successful in bringing out prosperity through production up gradation in planned and phased manner. The effort to engender the functions at all stages of development as far as these institutional efforts is concerned to facilitate desired women participation can be of immense help in streamlining the processes of both production and consumption. To ensure a sustainable livelihood, the need for creating space and opportunity to access agriculture technology and related training equitably and collaboratively for men and women is one proactive step.

The organizational structure which is the foundation for the overall agricultural development in general and this massive economic force in particular behind sixty million people in India, will have to be strengthened for social modifications. Preparation of such action plan and for take it to the doorsteps of rural countryside is the one line determined purpose of our democracy. Women in agricultural production are involved in every stage of food production, storage and utilization; they are the practitioners of indigenous technical knowledge and manage farm animals and other field operations. The agricultural research and education systems need be sensitized on mainstreaming issues of gender and empowering women in agriculture.

It is felt that improving their education, training, and access to resources, technology, information and knowledge can enhance Women’s abilities. It must also be appreciated that women have different levels of education, experience, skills, physique, and stamina etc., compared to men. Measures are to be taken for harnessing and enhancing their positive characters where in an apex body represented by all stake-holder organizations working for the cause of women in agriculture should develop methodologies for women empowerment that results in equity, equality and harmony. India believing in egalitarian society cannot stay behind in this significant, important and proactive step.

Understanding the issues related to women in agricultural research, education, extension and client systems and their interfaces is the necessary prerequisite to mainstream women issues and work for their empowerment.
The issues for the gender development and broad areas of instruction are presented below.

<table>
<thead>
<tr>
<th>Gender for development</th>
<th>Broad issues covering different aspects of gender as per the development criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender Roles in Agriculture</td>
<td>Roles in production processes in post-harvest processes, in seed selection in maintaining bio-diversity in rural non-farm sector. Factors determining gender roles class-size of landholding, landlessness agrarian system - ownership, tenancy, use caste (also religion and tribe) kinship and family patterns sector (farming, fisheries, forestry, dairying, etc.) agro-ecological region and farming system technological change crop season patriarchal bias. Historical trends gender roles in agriculture in pre-modern societies green revolution feminization of agriculture increased roles for women</td>
</tr>
<tr>
<td>Gender in time and labour use</td>
<td>Issues for study include: time use patterns labour use patterns women's multiple roles paid and unpaid work and its gender connotations invisibility of women's work and reasons for it time / labour accounting and national income statistics historical trends</td>
</tr>
<tr>
<td>Gender in knowledge / skills</td>
<td>Women-specific knowledge and skills are traditionally found in areas like seed selection, seed conservation and storage, biodiversity, food processing and value addition, medicinal plants, kitchen gardens etc. availability and access to training in new technology and skills is also gender - specific and often gender - biased</td>
</tr>
<tr>
<td>Gender and resource management</td>
<td>Land - affected by unequal inheritance rights, kinship and family structure, custom and tradition, law and religion water common property resources and customary rights purchased inputs are affected by differential access to education, training, credit, market, transport, etc. and by women’s reduced mobility and security as compared to men environmental degradation has differential impact on men and women health hazards of traditional and modernized agriculture for men and women</td>
</tr>
<tr>
<td>Impact of gendered systems</td>
<td>Economic loss of production and productivity bio-diversity absorption of labor in non-farm sector Social and cultural loss subordination of women in family and society Intra household differences in access to food, education, healthcare etc. deprivation of children and families and cultural impoverishment</td>
</tr>
<tr>
<td>Trends in development and their gender impact</td>
<td>Historical development of agriculture in India; Development paradigms since 1947; Social, cultural, and political changes; Green Revolution and its social; Technological change and its implications; Globalization of agriculture and its implications; Feminization of agriculture and its implications; Trends in various sectors; Current problems and future challenges, land rights - priority in land distribution inheritance rights access to credit and, Support systems health – care child – care education housing</td>
</tr>
</tbody>
</table>
Gender issues

The following are the activities taken up by NAARM during this year in the field of Gender.

An exclusive one week programme for women in middle management entitled ‘Management Programme for Women Scientists’ was organized from 2 to 7 September, 2002. During the programme participants were exposed to the topics on Leadership role in R&D organization, Interpersonal relationship, Personality development, Values and morals, Motivation, Effective communication, Management of financial resources, IT for improving efficiency, Organizational development, Creativity and problem solving, Brainstorming methodology for training needs of women scientists, Issues of professional women in agriculture, SWOT analysis, Managerial skills and Time management. The topics on Health and Stress management were also given emphasis along with managerial topics. Guest lectures from eminent speakers were organized, and, Yoga was introduced in daily curriculum. Women scientists from the ICAR, SAUs and KVKs participated in this programme.

The topic on ‘Gender issues in agriculture’ finds a regular place in FOCARS programme, Senior programmes, Refresher courses and Summer schools on Human Resource Development and Agricultural Research Project Management at NAARM.

NAARM emphasizes adequate representation of women participants in all its training programmes. During the organization of the Refresher courses, Summer schools, and Faculty Development Programmes, preference was given to accept the nominations of women candidates for encouraging their participation.

The first Agricultural Information Portal entitled ‘Agricultural Gateway to India’ being maintained at NAARM addresses “Gender issues” as a special category in the Home page to serve the information and networking needs of agriculture professionals.

As recommended in the study on “Professional (Graduate) women in agriculture”, the NAARM management involved the Women Cell representative in the relevant committees for policy decision. In fact, NAARM women employees were given key responsibilities in purchase committee, management of farm, Audio-visual and Photo labs.

The Women cell has been taking up activities of human resource development and empowerment of women employees of NAARM as well as their quality of work life. It had initiated the adult literacy programme for the women farm labor. It had also invited concerned experts to explain them the importance of thrift and healthcare. The tangible results were visible in a short time when the women labor opened the savings bank accounts and signed their names in vernacular language.
In order to mainstream the women labour into the system and stem unrest and develop kinship permeating the hierarchical differences among all categories of women employees of NAARM labour, supporting, administrative, technical and scientific staff, the cell had arranged community lunch-outs (Vanabhojanam) and sports events for women. This has resulted in interactive freeness among women employees and better articulation of representing their needs.

The cell represented the women concerns to the management, which aided in improvement of quality of work life. For example, since majority of the women employees working with computers were unable to work to their optimum capacity due to various ailments arising due to bad posture and ill suited furniture, the NAARM management supplied them ergonomically designed computer chairs on the proposal received from the Women Cell.

The cell has been taking active part in philanthropic activities and the women employees supported the management in its clean and green drive of campus development. The cell initiated and motivated not only the women from all categories including the supporting staff, but also all employees and trainees of NAARM to contribute their might for the lesser fortunate ones of the society, especially the orphaned children and inmates of old age homes. In fact, it is through women cell that all the employees contributed to the social cause and a separate account was opened where the contributions were saved and used to serve the cause of orphans.

The cell invited eminent women who had excelled in different fields to address women employees and also felicitated women employees of NAARM who exhibited exemplary talents in different spheres such as sports, science and official language to provide encouragement and motivate the women to emulate their example. The impact could be seen as there has been steady increase in women employees participation in sports and this year there was three-fold increase in their participation in Zonal Sports meet of ICAR, where NAARM woman employees won prizes in all the events they represented and one of them won the overall women athletics championship.

**Future strategies**

- Efforts are being made to generate database on Professional Women in Agriculture to be made available in the ‘Agriculture Gateway to India’ website to meet the networking requirements of women in agriculture.

- NAARM contemplates to take up special training programmes on skill development especially for women involved in technology.
transfer programmes such as KVKs, ATICs and AICRPs etc., in the NARS.

- Women Cell at NAARM would enhance activities for empowerment and improvement of quality of work life for all the women employees including the women farm labour by introducing official language in the adult literacy programme, activating self-help groups, facilitating in-service training for knowledge and skill development and taking up welfare activities.

- During the Tenth plan period, NAARM envisages to support programmes for women empowerment aimed at generation of database on gender perspectives with reference to roles, responsibilities, resources, constraints and opportunities on access to and control over resources within the boundaries of farm and household systems, and further, to frame gender model to focus on women central strategies for improving their participation and decision making roles and to link women’s claim in extension and training services for their empowerment.
Honours and Awards

Vasvik Award for Women Scientist

Dr R. Kalpana Sastry, Senior Scientist, NAARM received the “Smt Chandaben Mohanbhai Patel Vasvik Award for Women Scientist - 1999” instituted by Vividhalaxi Audyogik Sanshodham Vikas Kendra (VASVIK), Mumbai, in recognition of the work on Safflower pathology and in empowerment of farm workers in agricultural research farms. The award included a citation and cash prize of Rs.50,000/-. Hon’ble John Prescott, Deputy Prime Minister of United Kingdom under the chairmanship of Prof. M.G.K. Menon and Mr Suresh Prabhu as Guest of Honour presented the award to Dr Kalpana at Mumbai on September 20, 2002.

Official Language Implementation Award

The Academy won the Rajabhasha Shield of Town Official Language Implementation Committee South Central Railway for the year 2001 for the best work done in the implementation of the Official Language in twin cities. The award was presented by Shri M.S. Singla, Chairman, TOLIC, Hyderabad and Secunderabad and General Manager, South Central Railway, at a special function held on August 27, 2002 at Railnilayam auditorium. Dr T. Balaguru, Director Incharge, NAARM, received the award and presented brief account of official language implementation at NAARM.

Rajabhasha Puraskar

The Academy won the second prize of the Rajashri Tandan Rajabhasha Puraskar of Indian Council of Agricultural Research (ICAR), New Delhi for the year 2001-2002 for the best work done in the implementation of the official language in the “C” region (Ga Kshetra). The award was presented at a special function held on November 12, 2002. at Krishi Bhavan, New Delhi.

Rose Show Awards

The Academy bagged the C.S. Hemanth Memorial Silver Trophy (Prince of the Show) for the best bloom amongst Indian Roses, and Musthi Laxminarayana Challenge cup for queen of the show at the XXVII Annual Rose Show organized by Hyderabad Rose Society at Hotel Sarover
Apart from the above the Academy bagged seven first prizes, eleven second prizes and three third prizes under different sections of flower display. Again in the Annual Rose show organized by Horticultural Society, Secunderabād on December 21-22, 2002 at the Cantonment garden, the Academy bagged five trophies viz. Prince of the show, Somavarupa Subbarao Memorial Rolling cup; Rose show Rolling Trophy presented by Shruthi Marketing Association; Justice Gopalrao Ekbote Memorial cup and Indo Agri-world Hyderabad Shield. Apart from the above the Academy won eight first prizes and five second prizes under different sections of flower display.

**Sports**

**ICAR Inter-Institutional Sports Meet**

The ICAR Inter-institutional Tournament (Zone III) was hosted by the Academy, and was conducted at SVP National Police Academy Sports Complex, Sivarampally from November 12 to 16, 2002. Arjun Award winner Shri P.V. Ramana, Sports Officer, South Central Railway, Secunderabad took salute at the march-past on the opening ceremony of the sports meet and inaugurated the tournaments. Dr S.N. Saha, Joint Director, NAARM and Chairman, Coordination Committee welcomed the participants. Shri P.S.V. Prasad, IPS, Additional Director, SVP National Police Academy, Hyderabad, was the Chief Guest at the closing ceremony, while Dr B. N. Mathur, Director, NAARM presided over.

NAARM won the second overall team championship with 50 points. Ms Rukmini Ammal brought laurels to the Academy by winning four prizes in individual events and one in group event. She bagged first prize each in Shotput, Discus, Shuttle Badminton (singles) and third prize in Javelin Throw. She also won winners-up prize in Shuttle Badminton (doubles) along with Dr Sandhya Shenoy. Ms Savithri bagged first and second prize in 200 m, and 100m run events, and third in Long Jump. Ms Anuradha bagged third prize in High Jump and Ms Vijayalakshmi won runners-up prize in Chess. In the men’s events, Mr M.K. Samson bagged first, second and third prizes in Javelin Throw, Discus and Shotput respectively and runners-up prize in Carroms. Dr A. Debnath won the third prize in Javelin Throw. In the team event for men NAARM won runners-up prize in Table Tennis.

The NAARM sports contingent, which participated in the Fifth Andhra Pradesh State Veteran Amateur Athletic Meet - 2002 held at IGMC Stadium, Vijayawada, from December 6 to 8, 2002, secured nine prizes. In the athletic events (women) Ms K.K. Rukmini Ammal bagged first prize in Shotput and two second prizes Discuss and Javelin throw. In athletic events (men) Dr A. Debnath bagged two second prizes in Long jump and High jump and one third prize in Javelin throw. Mr M.K. Samson bagged two second prizes in Discus and Shotput and one third prize in Javelin throw.
Publications
Publications


Muthu Kumar and Rao, K.H. 2003. Recent Advances in Assessment of Microbial quality of Meat, Indian Food Industry. (accepted)


**Books / Monographs Published**


Resource Papers (developed and used as input in training)

Agricultural research systems in the world (T. Balaguru)
International agencies for agricultural R & D (T. Balaguru)
Global and national agricultural scenario (T. Balaguru)
Project based budgeting (S.K. Soam)
Project formulation & individual action plan development (S.K. Soam)
Methodologies for project DRIVER concept in HRM (S.K.Soam)
Monitoring & evaluation methodology for distance training program in agricultural research. (Jagannadham Challa, S.K. Soam, B.S. Sontakki, and V.K.J. Rao)
Guidelines for field experience training (N. Sandhya Shenoy, V.K.J. Rao, S.K. Soam, and B.S. Sontakki)
Characterization using raster GIS: Creating an Agro-climatic Zone map (M.N. Reddy)
HRM vis-à-vis research productivity (B.S. Chandel)
On-farm research/participatory research (B.S.Chandel)
Environmental Implications of agricultural research (K.H.Rao)
Biotechnological advances in animal sciences (K.H.Rao)
Effective teaching livestock models and Issues for sustainability of crop-animal production systems (K.H.Rao)
Crop-livestock interactions (K.H.Rao)
Foundations of individual behaviour (K.H.Rao)
Self-motivation for research (K.H.Rao)
Emerging Issues in livestock sustainability in developing countries (K.H.Rao)
Methods of effective teaching (K.H.Rao)
Motivational aspects in learning and teaching activity (K.H.Rao)
Failure factor in leadership (P. Manikandan)
Personality development and positive personality (P. Manikandan)
Organizational Climate (B.S. Sontakki)
Organizational Culture (B.S. Sontakki)
## Faculty News

**Papers presented at national workshops, seminars, conferences, symposia etc.**

<table>
<thead>
<tr>
<th><strong>Balaguru, T., Head,</strong> ARSMP Division; <strong>Sontakki, B.S.</strong> and <strong>V.K.J.Rao</strong> Senior Scientists</th>
<th>Role of Information and Transfer of Technology for Effective Dissemination of Coastal Agricultural Production Technologies at National Conference on Coastal Agricultural Research organized at ICAR Research Complex, Goa, from April 6 and 7, 2002.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balaguru, T., Head,</strong> ARSMP Division</td>
<td>National and Global Agricultural Scenario at the International Programme on Agriculture and Rural Development held at the National Institute of Rural Development (NIRD), Hyderabad from May 10 to 20, 2002. Project Management: Concept and Systems Approach at the National Workshop on Project Management held at the Extension Education Institute, Acharya N.G. Ranga Agricultural University (ANGRAU), Hyderabad from September 4 to 11, 2002.</td>
</tr>
<tr>
<td><strong>Balaguru, T., Head,</strong> ARSMP Division</td>
<td>Comparative Study of Fisheries Management in Malaprabha and Ghatprabha Reservoirs of Karnataka to the Sixth Indian Fisheries Forum of the Asian Fisheries Society Indian Branch organized at CIFE, Mumbai from December 17 to 20, 2002. User Charges for Livestock Extension Services in India – Some issues at the National Seminar on Responding to Changes and Challenges: New Roles of Agricultural Extension organized at College of Agriculture, Nagpur from 07 to 09 February 7 to 9, 2003.</td>
</tr>
</tbody>
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**NAARM Annual Report 2002-2003**

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<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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</thead>
</table>
| **Chandel B.S.** and **Nanda S. K.** | Senior Scientists  
Orienting Agricultural Research for Direct Short-term Attack on Poverty- An Exploratory Study at National Workshop on ‘Agricultural Policy- Redesigning R&D to Achieve Objectives on April 10th and 11th, 2002 at INSA, New Delhi. The workshop was organized by Centre for Advancement of Sustainable Agricultural (CASA), New Delhi |
| **Chandel, B.S.** and **Sontakki, B.S.** | Senior Scientists  
Prioritization of Production Constraints in Fisheries at Sixth Indian Fisheries forum, Asian Fisheries Society, Indian Fisheries Association, CIFE, Mumbai from December 17 to 20, 2002. |
| **Katyal, J.C.**  
**Rao, N.H.** | Director and Principal Scientist  
Base paper for Workshop on Good Governance; A framework for improving performance, accountability and work culture in NARS at National Academy of Agricultural Sciences, New Delhi, September 28, 2002. |
| **Mathur, B.N.** and **Rao, N.H.** | Director and Principal Scientist  
| **Nanda, S. K.** | Senior Scientist  
Shifting Cultivation in North-east India: Technological Alternatives and Extension Implications at 2nd International Conference on Sustainable Agriculture Water Resources Development and Earth Care Policies held from December 18 to 20, 2002 at New Delhi. |
| **Rao, K.H.** | Senior Scientist  
Flavour improvement in Buffalo Milk Chaddar Cheese by Goat Milk Supplementation at XXXII Dairy Industry Conference held at Chandigarh from March 7 to 9, 2003. |
| **Rao,N.H.** | Principal Scientist  
| **Sontakki, B.S.** | Senior Scientist  
(I) Prioritization of Fisheries Production Constraints and (ii) A Comparative Study of Fisheries Management in Malaprabha and Ghatprabha Reservoirs of Karnataka at Sixth Indian Fisheries Forum organized by the Asian Fisheries Society Indian Branch (AFSIB), Mangalore, Indian Fisheries Association and Central Institute of Fisheries Education, Mumbai at CIFE, Mumbai from December 17 to 20, 2002. |

**Participation in national workshops, seminars, conferences, meetings etc.**

<table>
<thead>
<tr>
<th>Name</th>
<th>Event</th>
</tr>
</thead>
</table>
| **Balaguru, T.**  
**Rama Rao, D.** | Head,  
ARSMP Division &  
ICM Division  
International Workshop on Instructional Design for Open-Distance Learning on Dryland Agriculture held at ICRISAT, Hyderabad on August 12 and 13, 2002. |
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathur, B.N.,</td>
<td>Director</td>
<td>Meeting of the Committee on extending visiting scientists schemes to SAUs on November 11, 2002 at Punjab Agricultural University, Ludhiana.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>National Seminar organized by Plant Protection Association on Resources Management in Plant Protection during 21st Century on November 14, 2002 at APCOB CTI Auditorium, Rajendranagar, Hyderabad.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>International Conference on Dairy Industry at Chandigarh on December 1 and 2, 2002 organized by the Indian Dairy Association.</td>
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<tr>
<td></td>
<td></td>
<td>30th Anniversary Celebrations of ICRISAT, Patancheru, Hyderabad on December 13, 2002.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIRD Foundation Seminar as a resource person for the theme on Management of Natural Resources for Livelihood System on January 29, 2003 at National Institute of Rural Development (NIRD), Hyderabad.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6th Agricultural Science Congress of NAAS from February 13 to 15, 2003 at Bhopal.</td>
</tr>
<tr>
<td>Chandel, B.S.</td>
<td>Senior Scientist</td>
<td>National Seminar on Stress Management in Oilseeds for attaining self reliance in vegetable oils from January 28 to 30, 2003 organized by Directorate of Oilseeds Research, Hyderabad.</td>
</tr>
<tr>
<td>Kalpana Sastry, R.</td>
<td>Senior Scientist</td>
<td>National Seminar on ‘Competitiveness of Indian Farm Produce in Global Market’ on February 21 and 22, 2003 at National Institute for Rural Development (NIRD), Hyderabad.</td>
</tr>
<tr>
<td>Manikandan, P.,</td>
<td>Head, HRD Division</td>
<td>Course on Strategies for management of Stress in Organization” organized at National Institute of Rural Development (NIRD), Hyderabad from July 15 to 20, 2002.</td>
</tr>
<tr>
<td>R.V.S.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nanda, S. K.</td>
<td>Senior Scientist</td>
<td></td>
</tr>
</tbody>
</table>
Workshop on Inter Organizational Co-ordination in Prevention of Natural Disaster Delhi from September 9 to 11, 2002 at Indian Institute of Public Administration, New Delhi.

Pathak, S.K., Finance and Accounts Officer

Programme on Financial Services in the Changed Economic Scenario at Institute of Public Enterprise, Osmania University, Hyderabad from July 18 to 20, 2002.


Prakasa Rao, R.V.V.S., Editor

Training programme on Web Publishing of Information Products and Services at National Institute of Rural Development (NIRD), Hyderabad from September 2 to 7, 2002.

Seminar-cum-Exhibition on House Journals conducted by Public Relations Society of India, Hyderabad Chapter on February 22nd and 23rd, 2003.

Rao, K.H., Senior Scientist

National Conference on “Emerging trends in Food technology” organized by Osmania University College of Technology (OUCT) from 28 February to 28 March 2003.

Rao, R.V.S. and Rao, K.H., Senior Scientists


Rao, V.K.J., Senior Scientist


Reddy, M.N., Principal Scientist

Course on IT Security at CMC, Hyderabad on Feb. 27 and 28, 2003.

Reddy, M.N., Principal Scientist and Sontakki, B.S., Senior Scientist


Reddy, M.N., Principal Scientist

Training programme on Libsys package at Libsys Corporation Regional Office (South), Bangalore from May 20 to 24, 2002.

Sandhya Shenoy, R., Senior Scientist

Training programme on Asian Regional Consultation on Rural Women in Knowledge Society at ICRISAT, Patancheru, Hyderabad from December 16 to 19, 2002.

Soam, S.K., Senior Scientist

Training programme on “Drought Management” organized by National Center for Disaster Management (NCDM), Indian Institute of Public Administration (IIPA), New Delhi from July 8 to 12, 2002.

Sontakki, B.S.
Senior Scientist

Training programme on “Information Technology for Rural Development” organized by the National Institute of Rural Development, Hyderabad from December 11 to 22, 2002.

Suresh Kumar, M.
Chief Administrative Officer
Reddy, M.N.
Principal Scientist

Training programme on Vigilance Awareness for ICAR institutes in the Southern Region at CTCRI, Trivendrum from December 18 to 20, 2002.

Lectures Delivered

Anwer, M.M.
Principal Scientist

“Leadership Styles” on June 20, 2002 at Extension Education Institute, Hyderabad to the workshop participants on Personality Development.


“Leadership Skills” on September 24, 2002 in development programme for supervisors at the BHEL Corporate R & D, Hyderabad.

“Leadership Styles in Extension Management” on October 9, 2002 at Extension Education Institute, Hyderabad in a programme of “Upgradation of managerial skills”.

“Leadership Styles” on November 27, 2002 in Extension Education Institute, Hyderabad to the workshop participants on Personality Development.

“Seven Habits of Highly Effective People” on March 7, 2002 at Water and Land Management Training and Research Institute (WALMTARI), Hyderabad for Executive Engineers.

Mathur, B.N., Director

“Prospectus of Role of Women for Diversification of Indian Agriculture - Focus on Dairy” in honour of Puratchi Thalaivi Selvi Jayalalitha, Hon’ble Chief Minister of Tamil Nadu on March 25, 2003 at Tamil Nadu Veterinary and Animal Sciences University, Chennai.
Chandel, B.S.
Senior Scientist

“Prioritization of Agricultural Research” to the workshop participants on Prioritization at Acharya N.G. Ranga Agricultural University (ANGRAU), Hyderabad on June 13, 2002.

Manikandan, P.
Head, HRD Division

“Project Planning: Concepts, Principles, and Techniques” to the participants of the Workshop on Project Management, held by Extension Education Institute, Hyderabad from September 4 to 11, 2002.

“Conflicts and Negotiation” in various programmes of Extension Education Institute, Hyderabad. Course on Personality Development, June 19 to 26, 2002; Workshop on Upgradation of Managerial Skills, October 4 to 11, 2002; Workshop on Personality Development, November 20 to 27, 2002.

“Concept of Conflict Resolution” in the Workshop on Leadership and Motivation conducted by Andhra Pradesh State Co-operative Bank (APCOB), Hyderabad. Also in other four programmes: September 12 to 14, 2002; October 24 to 26, 2002; December 2 to 4, 2002; and January 20 to 22, 2003.

“Goal Setting and Achievement, Performance Appraisal, Motivation, and Communication” to the participants of the Training Programme on HRD, organized by WALAMTARI, Hyderabad, from March 3 to 7, 2003

Reddy, M.N.
Principal Scientist

“Agricultural Research Information Systems” to the workshop participants of Management of Agricultural Information System organized by Extension Education Institute (EEI), Hyderabad on December 10, 2002.

“Design of Experiments” to the participants of P.G. Diploma course on plant protection at National Plant Protection Technology Institute (NPPTI), Hyderabad on July 29, 2002.

Soam, S.K.
Senior Scientist

“Application of Analytic Hierarchy Process in Prioritizing the Project Option” on November 9, 2002 at MANAGE, Hyderabad to the PG Diploma on Agri Business Management students.

“Project Based Budgeting” to the participants on Project Management at Extension Education Institute, Hyderabad on September 5, 2002.


Vidyasagar Rao, K.
Principal Scientist

“Introduction to Agriculture Statistics” to the trainee participants at National Plant Protection Training Institute (NPPTI), Hyderabad on July 19, 2002.
Faculty Development

A special training course was customized and offered on Multimedia and Web-design at CMC Ltd, Hyderabad. The training was initiated under the on-going NATP project’s HRD component. The programme was conducted from October 11 to 20, 2002 covered multimedia applications using Macromedia Flash and Director and Web designing using Macromedia Dreamweaver. The training course had a judicious mixture of theory and hands-on sessions. The emphasis was more on imparting skills in independent use of this software to develop interactive and animated presentations. The knowledge and skills gained in this training will help the faculty to develop interactive and animated modules for e-learning through CD-based and web-based delivery systems. Efforts are already afoot to develop e-lessons in selected topics in agricultural sciences and IPR. D. Rama Rao, Head, ICM Division, A. Gopalam, K. M. Reddy, Principal Scientists, R Kalpana Sastry, N. Sandhya Shenoy, Bharat S. Sontakki, V. K. Jayaraghavendra Rao, Senior Scientists and K. R. Prabhakar, Programme Officer were trained in this training programme.

P. Manikandan, Head, HRD Division, A. Gopalam, Principal Scientist, K.H. Rao, R.V.S.Rao, Senior Scientists and R.V.V.S. Prakasa Rao, Editor, K.V. Kumar, and L. Venkateswarlu, Technical Officers attended the Photoshop training programme organized by CMC Ltd., Hyderabad from January 27 to 30 and March 3 to 5, 2003.

N. H.Rao and M.N. Reddy, Principal Scientists and K.V. Kumar, Technical Officer attended the GIS training programme on introduction to ARC GIS 8.0 and MAP Objects organized by ESRI India, New Delhi conducted at NAARM, Hyderabad on January 6 to 10 and 30 and 31, 2003.

K.V. Kumar, Technical Officer and Mr P. Mohan Singh attended the Sun Solaris Administration at Whilshire Software Technologies at Hyderabad from September 11 to October 16, 2002.

B.S. Chandel attended a faculty up-gradation programme on Environmental Economics at Department of Economics, Jadarpur University from December 2 to 28, 2002.

Higher Degrees Awarded

B.S. Chandel, Satyanarayana Rao, R.V., and Rao, K.H., Senior Scientists, awarded Diploma in Management (DIM) and Post Graduate Diploma in Management (PGDIM) by Indira Gandhi National Open University (IGNOU), New Delhi.
Visitors

Dr Vijekoon Mudiyanselage Anuradha Wijekoon, Deputy Director Research, RDTRI, Sri Lanka along with a team of progressive farmers visited the Academy on May 13, 2002.

An eight-member delegation from Ethiopia Agriculture Ministry, led by Gashaw Shibabaw Tefera visited the Academy on May 28, 2002. The delegation had discussion with the Director and faculty members of the Academy.

Dr Jonanthan Woods, Web Developer, Asia Pacific Regional Technology (APRTC), Bangkok visited the Academy on June 4, 2002 to discuss about technical collaboration in developing of Web based modules for distance training.

Two senior officials from Council for Advancement of People’s Action and Rural Technology (CAPART) Regional Centre (South Zone) visited the Academy on September 17, 2002 to explore the possibility of associating the Academy for institutional consultancy to review the projects implemented by them.

Dr Syed Ali Hussain, Director, Pulses Research Centre, BARI, Bangladesh visited the Academy on September 26, 2002 and held discussions with the Director, NAARM on research activities of mutual interest.

His Excellence Dr Sharali Nurmatov, Deputy Minister, Ministry of Agriculture and Water Resources & Director General, Uzbek Scientific Centre of Agricultural Research, Uzbekistan visited the Academy on November 15, 2002.

Dr Md Abdur Razzaque, Member Director (Crops), Bangladesh Agricultural Research Council (BARC), Dhaka, Bangladesh visited the Academy on December 18, 2002 and held discussions with scientists on the areas of collaborative research and technology exchange of mutual interest.
Dr Mangala Rai, Director General, ICAR and Secretary, DARE along with Ms Shashi Misra, Addl. Secretary, Dr J.C. Katyal, Dy. Director General (Edn) and Mr K.N. Kumar, Director, DARE visited the Academy on January 28, 2003. Dr Mangala Rai addressed the faculty and staff members and laid foundation stone for Director’s office cum Conference building.

Prof Amir Karakalov, President of Tajik Academy of Agricultural Sciences, Dushanbe, Tajikistan visited the Academy on January 27, 2003.

A total of 358 students visited the Academy during this period. These students belonged to various colleges and campuses of different universities, which include Tamil Nadu Agricultural University, Coimbatore; Tamil Nadu Veterinary and Animal Science University, Chennai; University of Agricultural Sciences, Bangalore; College of Horticulture, Mudigere; Kerala Agricultural University, Trivandrum; Pandit Jawaharlal Nehru College of Agriculture and Research Institute, Karaikal.
Personnel

**Director’s Office**
- B.N. Mathur, Director (from November 1, 2002)
- S.N. Saha, Acting Director (upto October 31, 2002)
- T. Balaguru, Acting Director (upto June 4, 2002)

**Joint Director’s Office**
- S.N. Saha, Joint Director (upto March 28, 2003)
- R.K. Samanta, Joint Director (Training) (from March 29, 2003)
- Sarada Samanta, Private Secretary

**Agricultural Research Systems Management and Policies Division**
- T. Balaguru, Principal Scientist and Head
- S.N. Saha, Principal Scientist (from March 29, 2003)
- N. Hanumantha Rao, Principal Scientist
- S. Shanmugam, Principal Scientist
- K.M. Reddy, Principal Scientist
- M.M. Anwar, Principal Scientist
- R. Kalpana Sastry, Senior Scientist
- S. K. Nanda, Senior Scientist
- B.S. Chandel, Senior Scientist
- S.K. Soam, Senior Scientist

**Human Resource Development Division**
- P. Manikandan, Principal Scientist and Head
- A. Gopalam, Principal Scientist
- Jagannadham Challa, Principal Scientist
- K. Hanumantha Rao, Senior Scientist
- R.V.S. Rao, Senior Scientist

**Information and Communication Management Division**
- D. Rama Rao, Principal Scientist and Head
- C. Sriram, Principal Scientist (from September 2, 2002)
- K. Vidyasagar Rao, Principal Scientist
- M. Narayana Reddy, Principal Scientist
- N. Sandhya Shenoy, Senior Scientist
- B. S. Sontakki, Senior Scientist
- V. K.J.R. Rao, Senior Scientist
- N. Raghunath, Private Secretary

**Training Cell**
- P. Vijender Reddy, Technical Officer
- N.R. Nageswara Rao, Technical Officer

**Administration & Finance**
- M. Suresh Kumar, CAO
- S. K. Pathak, F&AO
- K. Janakiramaiah, AAO
Y. Shankar Rao, AAO
L. Jhansi Lakshmi, Private Secretary

Computer Cell
M.N. Reddy, In-Charge (ARIS lab)
N.H. Rao, In-charge (Computer lab)
M.J. Pradeep Kumar, Technical Officer
K.V. Kumar, Technical Officer

Farm Services
V. Murali, In-Charge
M. A. Basith, Technical Officer

Health Centre
A. Debnath, Medical Officer

Hostel Services
S. Shanmugam, In-Charge
Zameer Ahmed, Manager (Hostel Services)

Library Services
P. Manikandan, In-Charge
P.V. Nirmala, Technical Officer

Maintenance Cell
V. Murali, In-Charge
Sohail Ahmed Khan, Technical Officer

Official Language Cell
A. Gopalam, In-Charge
D. Venkateswarlu, Technical Officer
J. Renuka, Asst. Director (OL)
S. Pradeep Singh, Asst. Director (OL)

Photography & A.V. Services
K. Vidyasagar Rao, In-Charge
L. Venkateswarlu, Technical Officer
Bansidhar Nayak, Technical Officer

Press and Publication Services
D. Rama Rao, In-Charge
R.V.V.S. Prakasa Rao, Editor
P. Namdev, Technical Officer

Security Cell
B.Ch. Satyanarayana, Estate-cum-Security Officer

Transport Services
M. Suresh Kumar, Chief Administrative Officer
Y. Shankar Rao, AAO

Video Services
P. Manikandan, In-Charge
K. R. Prabhakar, Programme Officer (CCTV)
Ch. Janardhan Rao, Technical Officer
Technical Staff

**Grade T- 4**
G. Aneeya, Asst. Editor
P. Mohan Singh, Comp. Asst.
B. Veeraiah, Farm Asst.
N. Naresh Kumar, VCR. Optr.
M. Shekher Reddy, Dra
Ahire Laxman, Hort Tech. Asst.
L. Ramesh, Tech. Asst. (Elect.)
Sham Bahadur, Catering Inc.
S. Savithri, Catering Incharge

**Grade T-II-3/T- 3**
D. Dhanalakshmi, Lib. Asst.
ACPRN. Rao, Lineman
B. S. N. Murthy, Tech. Elect.
D. Rajagopal Rao, PAE Optr.
B. Satyanarayana, Tech. Elec.

**Grade T-I- 3**

**Grade T- 2**
P. Srinivas, Proof Reader
K. Swarajya Lalshmi, JLA
S. Sunder Raj, Media Optr.
N. Ashok, Driver
P. Eswari, P.T. Driver
T. Laxman, Driver
G. Muthyalu, Driver
M. Padmaiah, Tractor Driver
U. V. Ratnam, Driver
P. Gaikwad, Binder
N. Prabhakar, Plumber
D. R. S. Rao, Pump Driver
M. Srinivasa Rao, P. Driver
K. V. Narasaiah, Carpenter

**Grade T-1**
B. K. Venkatram, P. Driver

Administration

**P.P. Brahmaji, Supdt.**

**Assistants**
C. Bagaiah
P. G. Kohad
M. Narasimha Rao
P. Neelakantam
M. Dinesh
K. Prabhudas
T. Srinivas
G. Raj Reddy

**Personal Assistants**
P. Anand Kumar
A. Mercy
T. V. Ramadas
T. Vanisri
M. Venkatesh
Y. Anuradha
S. Seshai Sai
Rukmani Ammal

**Upper Division Clerks**
C. Phani Raj
B. Padma Saroja
P. Srinivasu
G. Jessie Ecclicia
R. Chandra Babu
M. Sridhar
C. Jullilus Samuel
Y. Gayatthi
K. R. Ghanashyam
P. Venkatesh
M. K. Samson
B. H. Dharmaraj
Rajashri Bokde

**Stenographers Grade III**
K. Radha Sujatha
S. Shanthi
V. Shailaja
N. Vijayalakshmi

**Lower Division Clerk**
K. Suryanarayana
Supporting
S.Swamy, Asst . Gestt. Operator
Venkatesham, Xerox Operator

Grade IV
G.Mani Bai

Grade III
M.Ashok
P.Balraj
C.Bickshapathi
G.V.Bikshapathi
Phool Kumar
B.Santhamma
P.Swamy
M.Yadaiah
Khalid
S.Shakuntala

Grade II
B.Bharathamma
S.Jangaiah
K.Kalavathi
K.Satyanarayana

Grade I
G.Anasuya
I.Bharathamma
C.Chandramouli
G.Dasaratha
M.Eswaramma
K.Hemlal
Nazia Parveen
R.Sattaiah
L.Satyanarayana
N.Sukunamma

New Appointments
♦ C. Sriram Joined as Principal Scientist on September 2, 2002
♦ B.N. Mathur joined as Director, NAARM on November 1, 2002
♦ R.K. Samanta joined as Joint Director (training) on March 29, 2003.

Promotions

<table>
<thead>
<tr>
<th>Name</th>
<th>From</th>
<th>to</th>
<th>w.e.f.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zameer Ahmed, Manager (Hostel Services)</td>
<td>T-6</td>
<td>T(7-8)</td>
<td>29-06-2001</td>
</tr>
<tr>
<td>Sham Bahadur, Catering Incharge</td>
<td>T-3</td>
<td>T-4</td>
<td>29-06-2001</td>
</tr>
<tr>
<td>K.K. Rukmini Ammal</td>
<td>Steno Gr.III</td>
<td>Personal Asst.</td>
<td>02-11-2002</td>
</tr>
</tbody>
</table>

Retirement

K. Janakiramaiah, Assistant Administrative officer was retired on superannuation on March 31, 2003. NAARM family wished a happy, peaceful retired life during the facilitation organized on the occasion to Mr Janakiramaiah.

B. Narayana, SSG.IV has taken voluntary retirement on July 1, 2003
कार्यकारी सारांश
गतिविधियों का संक्षिप्त विवरण

अप्रैल, 2002

♦ एक चमन सहभागी के लिए कृषि अनुसंधान प्रबंध पर अप्रैल 01-जून 30, 2002 तक एक अंतर्राष्ट्रीय प्रशिक्षण कार्यक्रम का आयोजन किया गया। डा.एन.एच.राव ने इसका समन्वय किया।

♦ अभिभ्रमण तकनीक पर अप्रैल 8-10,2002 तक एक कार्यशाला का आयोजन किया गया। इसके समन्वयक डा.एम.एन.अनवर, डा.के.एच.राव और डा.आर.बी.एच.राव थे। इस कार्यशाला में दो सहभागियों ने भाग लिया।

♦ कृषि अनुसंधान प्रारम्भिकता तकनीक पर अप्रैल 15-20, 2002 तक एक प्रशिक्षण कार्यक्रम का आयोजन किया गया। जिसमें 24 सहभागियों ने भाग लिया। डा.बी.एच.बेंडेल और डा.एम.एच.सोम इसके समन्वयक थे।

♦ कृषि अनुसंधान परियोजना प्रबंध के आदेश दाबों पर एक ग्रीमकालीन विद्यालय 15 अप्रैल से 5 मई, 2002 के दौरान आयोजित किया गया। इस ग्रीमकालीन विद्यालय के निदेशक डा.टी.बालरु, डा.एच.बाणूमग, डा.एच.एन.राव, डा.एम.सी.नन्दा एवं डा.एम.सी.सोम इसके समन्वयक रहे। 27 सहभागियों ने इस कार्यक्रम में भाग लिया।

♦ सामाजिक-आर्थिक अनुसंधान डेटा के लिए सांख्यिकीय विश्लेषण पर कार्यक्रम का आयोजन अप्रैल 30-मई 04, 2002 तक किया गया। जिसके समन्वयक डा.के.बी.एच.राव और डा.एम.एच.रेड्डी थे तथा इसमें चार सहभागियों ने भाग लिया।

मई, 2002

♦ शैक्षणिक प्रणाली विकास और शिक्षा प्रोडोगिकों में अभिव्यक्ति विकास पर मई 7-27, 2002 तक ग्रीमकालीन पाठशाला का आयोजन किया गया जिसमें 25 सहभागियों ने भाग लिया। इसके समन्वयक डा.पी.मणिकण्डन, डा.एच.एम.अनवर, डा.बी.एच.सोनंजकी और डा.के.एच.राव थे।

जून, 2002

♦ नेतृत्व और व्यक्तित्व विकास पर जून 10-15, 2002 तक डा.पी.मणिकण्डन और डा.एच.एम.अनवर व्यवसाय एक कार्यक्रम का आयोजन किया गया। 10 सहभागियों ने इसमें भाग लिया।

♦ कृषि में सृजना प्रोडोगिक में जून 12 से जून 2002 में 12 से जून 02, 2002 तक एक प्रशिक्षण पादयोजन का आयोजन किया गया। इसमें राज्य विश्वविद्यालयों और भ.कृ.अनु.प.संस्थाओं के 37 सहभागियों ने भाग लिया। डा.एच.एच.राव और डा.एम.नारायण रेड्डी इस पादयोजन के समन्वयक थे।
- कृषि में सुचना प्रौद्योगिकी पर पुनर्चयां पाद्यक्रम 5-25 फरवरी, 2002 तक आयोजित किया गया। डा.ए.ए.गोपालम और डा.बी.एस.सोनटकी व्यास समन्वित इस कार्यक्रम में 12 सहभागियों ने भाग लिया।
- गहन हिंदी प्रशिक्षण व कार्यशाला का आयोजन जून 18-22, 2003 तक किया गया। इसके समन्वयक डा.ए.ए.गोपालम और श्री प्रदीप सिंह थे। इसमें अवधिक संख्या में 47 सहभागियों ने भाग लिया।

जुलाई, 2002
- तनाव प्रबंध पर जुलाई 01-06, 2002 तक एक प्रशिक्षण पाद्यक्रम का आयोजन किया गया। डा.ए.ए.साहा और डा.बी.एए.गोपालम व्यास आयोजित कार्यशाला में 8 प्रतिनिधियों ने भाग लिया।
- प्रशासिक और वित्तीय प्रबंधन के लिए कॉम्प्यूटर प्रोग्राम पर जुलाई 17-27, 2002 तक एक पाद्यक्रम का आयोजन किया गया। इसके समन्वयक डा.के.विखायागर राव, डा.आर.कल्पना शास्त्री और श्री एस.ए.के.पाटल थे। इस पाद्यक्रम व्यास 46 प्रशासिक और वित्तीय कार्यक कार्यकालिक लाभधिक हुए।
- कृषि शिक्षा के प्रबंध पर 23-25 जुलाई, 2002 के अंतर्गत डा.ए.ए.ना.साहा डा.एए.गोपालम व्यास आयोजित कार्यशाला में 14 प्रतिनिधियों ने भाग लिया।
- कृषि में सुचना प्रौद्योगिकी पर पुनर्चयां पाद्यक्रम 31 जुलाई से 20 अगस्त, 2002 के दौरान कृषि राज्य विषयविद्यालयों तथा लक्ष.ए.ए.न.प. के वैज्ञानिक कार्यकों के लिए आयोजित किया गया। इसमें 36 सहभागियों ने भाग लिया। डा.के.बी.एस.राव और डा.बी.एस.सोनटकी इसके समन्वयक रहे।

अगस्त, 2002
- 75 वां कृषि अनुसंधान सेवा बुनियादी पाद्यक्रम (फोकास) 01 अगस्त से 25 नवंबर, 2002 के दौरान आयोजित किया गया जिसका समन्वयन डा.ए.ए.अनवर, डा.संद्या शेखारी एवं डा.आर.एस.राव ने किया। इस कार्यक्रम में 23 सदस्यों ने भाग लिया।
- कृषि अनुसंधान प्राथमिकता नकलिक पर डा.बी.एस.चन्देल एवं डा.एस.के.सोम व्यास 26-31 अगस्त, 2002 के दौरान एक प्रशिक्षण कार्यक्रम आयोजित किया गया जिसमें 28 सहभागियों ने भाग लिया।

सितम्बर, 2002
- डा.एस.संद्या शेखारी एवं डा.आर.कल्पना शास्त्री व्यास महिला वैज्ञानिकों के लिए प्रबंध कार्यक्रम 02-07 सितम्बर, 2002 के दौरान आयोजित किया गया। इस कार्यक्रम में 11 कृषि महिला वैज्ञानिकों ने भाग लिया।
- कृषि में मानव संसाधन प्रबंध के एक उन्नत पाद्यक्रम पर ग्रीष्मकालीन पाद्यक्रम 18 अगस्त से 8 अगस्त, 2002 के दौरान आयोजित कर गई, जिसमें 25 सहभागियों ने भाग लिया। डा.एस.एन.अनवर, डा.बी.रामाशाख एवं डा.बी.के.जे.राव इसके समन्वयक रहे।
✦ कृषि अनुसंधान एवं विकास के प्रभाव मूल्यांकन पर एक प्रशिक्षण कार्यक्रम सितंबर 19-25, 2002 के दौरान डा.बी.एस.चंदेल एवं डा.एस.के.सोम द्वारा आयोजित किया गया जिससे 11 सहभागियों ने भाग लिया।

अक्टूबर, 2002

✦ डा.एन.संघर शैफाय एवं डा.एन.नारायण रेड्डी ने बेब डिजाइनिंग एवं बेब पेंजिंग विकसित करने पर एक प्रशिक्षण कार्यक्रम 3-9 अक्टूबर, 2002 के दौरान आयोजित किया गया। इस कार्यक्रम में राज्य कृषि विश्वविद्यालयों एवं भारतीय अनु.प.के.विभाग संस्थानों के 9 सहभागियों ने भाग लिया।

✦ कृषि में कंप्यूटर प्रयोग पर एक पादयुक्त 22 अक्टूबर से 01 नवम्बर, 2002 तक एक पादयुक्त कार्यक्रम आयोजित किया गया, जिसके समन्वय डा.के.एम.रेड्डी एवं डा.के.विद्यासागर राव रहे। यह कार्यक्रम 13 सहभागियों के लाभार्थ आयोजित किया गया।

✦ शैक्षणिक विकार्डों उपादन पर एक प्रशिक्षण कार्यक्रम श्री.के.एक्स.भाकर एवं श्री.एन.जानकर राव व्यावहार 23 अक्टूबर से 02 नवम्बर, 2002 के दौरान आयोजित किया गया, जिसमें 17 सहभागियों ने भाग लिया।

नवम्बर, 2002

✦ कृषि अनुसंधान परियोजना प्रबंध पर डा.एस.एन.सहा एवं डा.एन.कल्पना शार्मा व्यावहार 6-26 नवम्बर, 2002 के दौरान एक प्राकृतिक पादयुक्त कार्यक्रम आयोजित किया गया। इस पादयुक्त से 19 सहभागियों ने भाग लिया।

✦ कृषि अनुसंधान में जी.एस.एम.प्रयोग पर एक प्रशिक्षण कार्यक्रम 20-30 नवम्बर, 2002 के दौरान आयोजित किया गया जिसमें 7 सहभागियों ने भाग लिया। डा.एन.नारायण रेड्डी एवं डा.एन.एच.राव इस पादयुक्त के समन्वय रहे।

✦ डा.जनानाथ चर्चा और डा.एन.जी.एस.राव ने नवम्बर 21-27, 2002 तक कृषि अनुसंधान के सातवें प्रबंध विकास कार्यक्रम का आयोजन किया गया। इसमें 10 सहभागियों ने भाग लिया।

✦ राजभाषा नीति पर नवम्बर 27-30, 2002 तक कार्यशाला का आयोजन किया गया। इसमें 46 सहभागियों ने भाग लिया। डा.ए.गोपालम और श्री.डी.बेंकेडेस्वर्लुं इसके समन्वय थे।

दिसंबर, 2002

✦ कृषि में सूचना प्रौद्योगिकी पर पुनर्चरित्रण पादयुक्त 3-23 दिसंबर, 2002 तक आयोजित किया। इसमें 36 सहभागियों ने भाग लिया। डा.के.विद्यासागर राव और डा.के.एम.रेड्डी इस पादयुक्त के समन्वय थे।

जनवरी, 2003

✦ राज्य कृषि विज्ञानविद्यालय के लेखा नियंत्रकों के लिए प्रबंध विकास कार्यक्रम 6-7 जनवरी, 2003 आयोजित किया गया। इसके समन्वय डा.एस.एन.सहा थे। इसमें 32 सहभागियों ने भाग लिया।
फरवरी, 2003

- कृषि अनुसंधान प्रबंध विकास का पद्धति कार्यक्रम का जनवरी 14-18, 2003 तक आयोजित किया गया जिसमें समन्वयक डॉ. जगनाथ चाल्ला और डॉ. सत्यनाथ सहा थे। इसमें सात सहभागियों ने हिस्सा लिया।
- गहन हिंदी प्रशिक्षण व कार्यशाला का आयोजन 18-22 फरवरी, 2002 तक किया गया। डॉ. गोपाल और श्रीमती जे. रेड्डी व्यास समन्वित इस कार्यक्रम में 49 सहभागियों ने भाग लिया।
- क्षेत्र अनुभव प्रशिक्षण(एएएई.) समन्वयकों के लिए प्रबंध विकास कार्यक्रम का आयोजन 20-26 फरवरी, 2003 तक किया गया। डॉ. एम. मोहनलाल, डॉ. एस. ए. सहा और डॉ. संयोजन शेषाय व्यास समन्वित इस कार्यक्रम में 14 एएएई. समन्वयकों ने भाग लिया।

मार्च, 2003

- कृषि अनुसंधान संगठनों के निष्पादन प्रदर्शन पर कार्यशाला 3-4 मार्च, 2003 तक आयोजित की गई जिसमें रा. कृ. वि. और भा. कृ. अ. प. संस्थानों के 35 विभाग अधिकारियों ने भाग लिया। डॉ. टी. बालगुर, डॉ. अर. कल्पना शशी और डॉ. आर. जी. एस. राव इस कार्यशाला के समन्वयक रहे।
- कृषि अनुसंधान में जी. आई. एस. के उपयोग पर प्रशिक्षण कार्यक्रम 3-12 मार्च, 2003 तक आयोजित किया गया। इसके समन्वयक डॉ. एन. ए. राव और डॉ. एम. एन. रेड्डी थे। इसमें 16 सहभागियों ने भाग लिया।
- राष्ट्रीय कृषि अनुसंधान सेवा के संगठनात्मक भबात्मकता के लिए मा. सं. वि. नीति पर एक कार्यशाला 11-12 मार्च, 2003 को आयोजित की गई। डॉ. जे. चाल्ला और डॉ. के. विद्यासागर राव इसके समन्वयक थे तथा इस कार्यशाला में 65 सहभागियों ने भाग लिया।
- महाराष्ट्र कृषि विश्वविद्यालय, परभणी में शैक्षिक पद्धति और अनुदेशात्मक प्रशिक्षण पर कार्ययात्मक विकास कार्यक्रम 15-21 मार्च, 2003 तक आयोजित किया गया। डॉ. गोपाल और डॉ. के. एच. राव इस परिसरत कार्यक्रम के समन्वयक थे।
- वेब अभिभावक पर एक उन्नत पादयोग 24-29 मार्च 2003 तक आयोजित किया गया। डॉ. एन. ब्रह्मचर्य और डॉ. एन. संतरे शेषाय इस प्रशिक्षण कार्यक्रम के समन्वयक थे जिसमें 15 सहभागियों ने भाग लिया।
कार्यकारी सारांश

सन् 1976 में अपने प्रारंभिक काल से ही, राष्ट्रीय कृषि अनुसंधान प्रबंध अकादमी (नाम) ने भारतीय कृषि अनुसंधान पद्धति को अपने बहुआवामी योगदान से सुधार बनाने में अत्यंत प्रमुख भूमिका निभाई है। अकादमी राष्ट्रीय कृषि अनुसंधान पद्धति को मानव संसाधन विकास में सुधार करने के लिए इसके समर्थन किया है। 2002-2003 के अन्तर्गत, नाम के द्वारा भारतीय राष्ट्रीय कृषि अनुसंधान पद्धति का साथ ही अन्य विकासप्रयोग से आज़ादी के कृषि अनुसंधान से शिक्षा प्रबंध के क्षेत्रों में अपना निरंतर समर्थन है। 

अकादमी का वर्षगाँठ का रजत जयंती समारोह प्रबंध-एक द्वारा नियामक की कृतियों पर एक राष्ट्रीय सेमिनार से समाप्त हुआ। 01 सितंबर, 2002 के स्थायित्व दिन समारोह का एक भाग था।

मानव संसाधन विकास के क्षेत्रों के एक भाग के रूप में देश तथा 
विकासशील देशों के राष्ट्रीय कृषि विश्वविद्यालयों एवं भारतीय राष्ट्रीय कृषि अनुसंधान पद्धति के वैज्ञानिक/संसाधन सदस्यों के लिए अनुसार अकादमी द्वारा कई प्रशिक्षण कार्यक्रम आयोजित किए गए। विशेषतः के अन्तर्गत कुल 36 ऐसे कार्यक्रम तथा कुल लगभग 829 वैज्ञानिक, शिक्षक, प्राधिकारिक एवं विशेष अधिकारियों ने इन कार्यक्रमों में भाग लिया।

अकादमी का विभाग तीन वैद्यकशाला कार्यक्रम जैसे भारतीय राष्ट्रीय कृषि अनुसंधान पद्धति के लिए, आयुर्विज्ञान, अहमदाबाद में राष्ट्रीय कार्यक्रम, शिलांग में मेहनत सरकार के कृषि अधिकारी तथा पुष्पविकीर्ति एवं प्राणी विज्ञान महाविद्यालय, परम्पराओं के संकल्प के लिए आयोजित किए गए। कुल 84 सहभागी वर्ष रत के विभाग, अनुसंधानकर्ता 
शिक्षाविद्या, विस्तार अधिकारी सभी ने इस कार्यक्रम में भाग लिया एवं लाभ प्राप्त हुए।

विनायक वर्ष, नाम का विभाग की ग्रीष्मकालीन शीतकालीन विश्वविद्यालय जैसे कृषि अनुसंधान परियोजना प्रबंध के क्रमांकों, शैक्षणिक प्रोफेसरों के अध्ययन उन्नतियों एवं कृषि में मानव संसाधन प्रबंध कार्यक्रम आयोजित किए गये। भारतीय अनुसंधानों तथा राष्ट्रीय कृषि विश्वविद्यालयों के लगभग 76 वैज्ञानिकों ने इसका लाभ उठाया।

वर्ष की एक महत्वपूर्ण उपलब्धि यह रही कि भारतीय अनुसंधान/नाम/इंस्टीट्यूट की 
सहभागी परियोजना कृषि अनुसंधान प्रबंध के लिए सुधार प्रशिक्षण सफलता पूर्वक पूरा 
हुआ। इस परियोजना की समाप्त गतिविधियों के रूप में 7-8 नवम्बर, 2002 के दौरान 
सुधार प्रशिक्षण राष्ट्रीय समेतल अकादमी में आयोजित किया गया। इसका उद्देश्य 
राष्ट्रीय कृषि अनुसंधान पद्धति के लिए एक राष्ट्रीय समीक्षा स्थापित करना 
तथा परियोजना पर एक अंतर्गत अनुसंधान प्रतिभावन का विस्मय करना था। नाम में 
एक अंतर्गत अनुसंधान के में संबंधित प्रस्ताव भी प्रस्तुत किया गया तथा उस पर भी विचार-विवरण 
किया गया।

राष्ट्रीय कृषि अनुसंधान पद्धति के संगठनात्मक प्रभावात्मक के लिए मानव
संसाधन विकास नीति पर आंश प्रदेश सेस परियोजना 31 मार्च, 2003 को पूरा हुआ।
परियोजना प्रतिवेदन भी भा.क.अनु.प. के शिक्षा विभाग को प्रस्तुत किया गया तथा
राष्ट्रीय कृषि अनुसंधान पद्धति के संगठनात्मक प्रभावात्मकता के लिए मानव संसाधन विकास नीति पर 11–12 मार्च, 2002 के दौरान एक राष्ट्रीय कार्यशाला भी आयोजित की गई। इस कार्यशाला में परियोजना प्रतिवेदन का विमोचन भी किया गया।
भारतीय कृषि अनुसंधान संस्थानों(एन.ए.आर.ओ) के निर्माण मूल्यांकन एवं
लेखा आभिवृद्धि पर एन.ए.टी.पी.परियोजना के तहत 3–4 मार्च, 2003 के दौरान कृषि
अनुसंधान संगठनों के निर्माण मूल्यांकन पर एक राष्ट्रीय कार्यशाला आयोजित की
गई। इसका उद्देश्य एन.ए.टी.पी. में कार्यशाला तथा सेवानिवृत्त दोनों पक्षों के बारेंि
स्तर के कार्यकर्ताओं की सूचना के सूक्ष्म परिक्षण के आधार पर विकसित एक क्रमबद्ध
कार्यप्रणाली को संरचित करना रहा। इस कार्यशाला में कुल 25 सहभागी,
भा.कु.अनु.प.संस्थानों के निदेशक, राष्ट्र कृषि विश्वविद्यालयों के कुलपति तथा अनुसंधान
निदेशक सभी ने भाग लिया।
विभाग कार्यशालाओं, सम्मेलनों, संग्रहितों में संकाय सदस्यों ने 56 लेख
प्रकाशित किए तथा 13 लेखों को प्रस्तुत किया। इस वर्ष में अकादमी व्यापा कई
प्रकाशन—जैसे रजत जंपती स्मारक प्रशिक्षण उपलब्धियों, फोकास सहभागियों को
निर्देशिका परियोजना प्रतिवेदन—भारत में एफ.एस.आर.एक केस अध्ययन,
एफ.ई.टी.केन्द्रों की निर्देशिका इत्यादि प्रकाशित किए गये तथा कुल 11आकर्षक
लेख जैसे प्रशिक्षण अनुसंधान और विकास संगठनों के कार्यवाही संबंधी कार्य निदेशक
समस्याओं का समाधान? इंटरनेटीक सामाजिक और कृषि व्यापार के भारत में अवसर,
भा.कु.अनु.प. में उच्च अनुसंधान प्रदर्शन उत्पन करना, संगठनात्मक परिवर्तन व्यापार
दर्द प्रदर्शन और व्यापारिक विकास, कृषि अनुसंधान संस्थानों में बहुमत नीति, भा.कु.अनु.प.
में प्रमुख परिवर्तन, संगठनात्मक और प्रबंध सुधार, कृषि विज्ञान और कार्यरत व्यापार
प्रशिक्षण में समाकलन हेतु मानव संसाधन प्रबंध रणनीति, कृषि अनुसंधान में स्वायत्त
स्थापन करना, कृषि अनुसंधान प्रबंध के निहिताधिकार, कृषि अनुसंधान का निर्माण
उपलब्धता के लिए आवश्यक करना—एक अन्वेषणात्मक अध्ययन, कृषि शिक्षा, दस्तों
पंचवर्षीय पोलियों को रणनीति, भारत में कृषि अनुसंधान और शिक्षा में सूचना और
sंचार प्रौद्योगिकी को समाहित करना, राष्ट्रीय कृषि अनुसंधान पद्धति में नैतिक मूल्य
और मान्यताओं परिचालित करना।
एफ.जी.आई.एस. प्रशिक्षण प्रयोगशाला जिसमें पाँच कार्य स्टेशन, डिजिटाइजर,
ए.आर.सी.आई.एस. फ्लाईफ्लैश, डि.एस. एस. ए.आर.सी.आई.एस. के अन्तर्गत अन्य और
विशेष विषयों पर विद्यार्थी विभाग की कार्यशाला के आई.टी.संस्थानों में जोड़ा गया।
अकादमी को नगर राजभाषा कार्यान्वयन सीमित, दक्षता मध्य रेलवे व्यवस्था वर्ष
2001 के दौरान गरीबदेश में उपर राजभाषा कार्यान्वयन हेतु पुरस्कृत किया गया।
अकादमी ने भारतीय कृषि अनुसंधान परिषद, नई दिल्ली वर्ष 2001–2002 के
लिए (रै) हेतु में राजभाषा के कार्यान्वयन हेतु राजस्व संगठन पूर्कार प्राप्त किया।
डॉ.आर.कल्पना शास्त्री, वरिष्ठ वैज्ञानिक, नामं को विविधालक्षी औद्योगिकी संस्थान विकास केंद्र, मुंबई ने क्रयूम रोगविज्ञान और कृषि अनुसंधान फाउंडेशन के श्रेयसी के साधारण करण पर किए कार्य हेतु, श्रीमती चन्द्रबेन मोहनबाई पेटल वात्सल्य अवार्ड महिला वैज्ञानिक 1999 प्रदान किया।

अकादमी की 27 वें वार्षिक गुलाब प्रदर्शनी में 27 वें वार्षिक गुलाब प्रदर्शनी में सी.एस.हेमन्त स्वारक्ष सिल्वर ट्राफी (प्रिंस ओफ द शो) भारतीय श्रेणी गुलाब हेतु तथा मुरूल लक्ष्मी नारायण चले-जा कप (क्वीन ओफ द शो) प्राप्त हुए। हार्टिकल्वर सोसाइटी ब्यारा आयोजित वार्षिक प्रदर्शनी में अकादमी को पाँच ट्राफी, प्रिंस ओफ द शो, सोमवरण संगीतवाण मेमोरियल रोलिंग कप, रोज़ शो रोलिंग ट्राफी, एकबोटे मेमोरियल कप और इंडिया-एशिया वर्ल्ड हेरिटेज शॉर्टे प्राप्त हुई। अकादमी को पुण्य प्रदर्शन में आठ प्रथम पुरस्कार और पाँच विद्वान पुरस्कार प्राप्त किया।

अकादमी में भा.कु.अनु.प. अन्तर संस्थानीय खेल प्रतियोगिता (क्षेत्र-3) का आयोजन किया तथा 50 अंकों के साथ टीम चैंपियन में दूसरा स्थान प्राप्त किया।

नामं खेल दल ने पाँचवे अंतरराष्ट्रीय राष्ट्रीय वेस्टोर्न एथलिटिक मिट-2002, आई.जी.एम.सी. स्टेडियम विज्ञानवादा में भाग लिया तथा नौ पुरस्कार प्राप्त किए।