

HRM INITIATIVES AND ACCOMPLISHMENTS OF ICAR (2014-18)



Indian Council of Agricultural Research
Krishi Bhavan, New Delhi 110 001

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Printed:

October, 2018

Compiled and Edited by:

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Citation

ICAR 2018. HRM Initiatives and Accomplishments of ICAR (2014-18).
Indian Council of Agricultural Research, New Delhi, pp. 1-55

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Production:

Dr V K Bharti, Chief Production Officer & Sh Punit Bhasin, ACTO (Production), DKMA

Cover design:

Dr D N Baraskar, Sr. Technical Officer, Artist-cum-Photographer, ICAR-IISR, Indore

Printed by Dr S K Singh, Project Director, Directorate of Knowledge Management in Agriculture; Lasertypeset at M/s Dot & Design, 208, Reshabshree House, Ranjeet Nagar Comm. Complex, New Delhi 110 008 and printed at M/s Royal Offset Printers, A-89/1, Naraina Industrial Area, Phase-I, New Delhi 110 028



राधा मोहन सिंह
RADHA MOHAN SINGH



कृषि एवं किसान कल्याण मंत्री
भारत सरकार
MINISTER OF AGRICULTURE
& FARMERS WELFARE
GOVERNMENT OF INDIA

26 September 2018

संदेश

मुझे यह जानकर अत्यधिक प्रसन्नता है कि भारतीय कृषि अनुसंधान परिषद, नई दिल्ली ने “**HRM Initiatives and Accomplishments of ICAR (2014-18)**” नामक प्रकाशन के माध्यम से विगत चार वर्षों में (2014-18) परिषद के सभी कार्मिकों के प्रशिक्षण एवं क्षमता निर्माण के लिए की गई विभिन्न पहल एवं उपलब्धियों को विस्तार से अवगत कराने का निर्णय लिया है। परिषद ने विगत चार वर्षों के दौरान मुख्यालय में मानव संसाधन प्रबंधन इकाई की स्थापना से लेकर सहायक महानिदेशक (मासंप्र) की नियुक्ति तथा प्रशिक्षण कार्यक्रम की संस्थागत प्रणाली विकसित कर, सभी वर्ग के कार्मिकों को दक्षता आधारित प्रशिक्षण एवं क्षमता निर्माण पर बल दिया है। पहली बार परिषद के विभिन्न संस्थानों एवं मुख्यालयों में कार्यरत कार्मिकों के लिए “**भाकृअनुप मानव संसाधन प्रबंधन नीति: प्रशिक्षण एवं क्षमता निर्माण**” को सफलतापूर्वक क्रियान्वित किया है, जिससे प्रशिक्षणार्थियों की संख्या के साथ कार्य प्रदर्शन में आशातीत वृद्धि दर्ज की गई है।

मैं परिषद को “**HRM Initiatives and Accomplishments of ICAR (2014-18)**” के सफलतापूर्वक प्रकाशन पर बधाई देता हूँ। आशा करता हूँ कि प्रशिक्षण कार्यक्रम निर्बाध रूप से वृद्धि करेंगे ताकि परिषद अपने मिशन एवं दृष्टि को अर्जित कर किसानों की आय वर्ष 2022 तक दुगुनी करने में महत्वपूर्ण भूमिका अदा कर सके।

राधा मोहन सिंह

(राधा मोहन सिंह)



कृषि एवं किसान कल्याण
राज्य मंत्री
भारत सरकार
MINISTER OF STATE FOR AGRICULTURE
& FARMERS WELFARE
GOVERNMENT OF INDIA

गजेन्द्र सिंह शेखावत
GAJENDRA SINGH SHEKHAWAT

13 September 2018

MESSAGE

I AM glad to know that Indian Council of Agricultural Research, New Delhi has taken a wide range of HRM initiatives and accomplished a lot with respect to Training and Capacity Building of all categories of ICAR employees during the last four years i.e. 2014-18 and bringing out a publication iHRM Initiatives and Accomplishments of ICAR (2014-18). During this period, ICAR organized training and capacity building programmes from grassroot level staff (i.e. Skilled Support Staff and Drivers) to the Senior Officers of ICAR with international component and also effectively implementing iICAR HRM Policy: Training and Capacity Building. There has been tremendous increase in the competency enhancement of all categories of employees with judicious use of HRD fund. The overall impact of training has been Considerable-Great Extent.

I compliment ICAR for effective HRM Initiatives and Accomplishments during a short span of four years. I hope, this publication will be useful for further scaling up the Training and Capacity Building of employees of ICAR as well as of other Central Govt. Ministeries/ Departments.

(Gajendra Singh Shekhawat)



त्रिलोचन महापात्र, पीएच.डी.

एक एन ए, एक एन ए एस सी, एक एन ए ए एस
सचिव एवं महानिदेशक

TRILOCHAN MOHAPATRA, Ph.D.

FNA, FNAsc, FNAAS
SECRETARY & DIRECTOR GENERAL

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कृषि अनुसंधान और शिक्षा विभाग एवं
भारतीय कृषि अनुसंधान परिषद
कृषि एवं किसान कल्याण मंत्रालय, कृषि भवन, नई दिल्ली 110 001

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DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION
AND

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FOREWORD

IN order to improve growth and development of the individuals and the Organization, Training and Capacity Building of each and every employee has its paramount importance. The right type of training at right stage of career enhances the efficiency and effectiveness of the employees leading to higher organizational performance. Indian Council of Agricultural Research (ICAR) decided to lay more thrust and focus on competency enhancement of all categories of employees for better realization of organizational mandate and vision.

ICAR is served by about 19, 200 employees under four different categories namely Scientific, Technical, Administrative and Skilled Support Staff. Developing competency of each employee of different category as per National Training Policy - 2012 of GoI was a great challenge for an organization like ICAR. This needed concerted and focused initiatives to enhance the efficiency and effectiveness of each employee through various training and capacity building programmes. In order to develop a system of training in ICAR, Assistant Director General (Human Resource Management) was appointed to act as Training Manager and created HRM Unit at ICAR Headquarters in 2014. Subsequently, Institutionalized System of Training was developed and *iICAR HRM Policy : Training and Capacity Building* was formulated and implemented. During the initial phase of implementation of Policy (2014-16), some structural and framework related initiatives were taken while, effective implementation of Policy took off during 2016-18 and resulted in explicit desirable changes in the system. Special focus was given for training and capacity building of those categories of employees who were never considered for effective training in the past. In this process, many HRM activities are happening in ICAR which never happened earlier and even never thought earlier like trainings of regular Drivers and Skilled Support Staff and international exposure visits of



multidisciplinary Scientific and Administrative staff together. That is why many Central Govt. Ministries/Departments including DoPT are acknowledging the HRM initiatives and accomplishments of ICAR.

The Council acknowledges the valuable support and contributions of Sh C. Roul, Special Secretary, DARE & Secretary, ICAR, Internal Finance Division, Subject Matter Divisions, Directors and HRD Nodal Officers of ICAR-Institutes for all the HRM Initiatives, their effective implementation and Accomplishments in a short span of four years. I appreciate the sincere and persistent efforts of Dr A K Vyas, ADG (HRM) and Dr N K Jain, Principal Scientist (HRM) for such praiseworthy HRM Initiatives and Accomplishments of ICAR during 2014-18.

The summaries salient HRM initiatives, activities and achievements of ICAR in this publication will be useful for various stakeholders and invite their constructive views for further scaling up the Training and Capacity Building of ICAR employees.

Dated the 20th August, 2018
New Delhi

(Trilochan Mohapatra)
Secretary, DARE & DG, ICAR
Krishi Bhawan, New Delhi



PREFACE

IT gives me immense pleasure to share that the Indian Council of Agricultural Research (ICAR) has been laying emphasis and greater focus on Training and Capacity Building of all categories of ICAR employees (Scientific, Technical including Drivers, Administrative including Finance and Stenographer Grades, and Skilled Support Staff) since 2014. In order to develop a system of training and giving appropriate direction, speed and scale to the Training and Capacity Building of employees, ICAR appointed Assistant Director General (HRM) in 2014 as Training Manager as per National Training Policy - 2012 of GoI and created HRM Unit at ICAR Headquarters in September, 2014 which started developing Institutionalized System of Training in ICAR, and formulated and implemented *iICAR HRM Policy: Training and Capacity Building* with the help of NAARM, Hyderabad and other ICAR-Institutes. Special focus is being given for training and capacity building of those categories of employees who were never considered for any kind of effective training in the past.

For the first time in ICAR, many strategic initiatives were taken like implementation of Systematic Approach to Training through Training Needs Analysis (TNA); Design, Development, Implementation, Evaluation, and Impact Assessment of Training. First time, ICAR-Institutes/HQs identified 253 training need areas for all categories of employees; developing Annual Training Plan (ATP) and organized large number of new specialized training programmes for Technical Staff, HRD Nodal Officers, Scientific Staff, Administrative Staff, Stenographer Grades, Farm Managers, Guest House Incharges/Caretakers, regular Drivers and Skilled Support Staff. Besides for the first time, Senior Executive Development Programme for Senior Officers of ICAR was organized with international exposure visits of multidisciplinary Scientific and Administrative staff together. ICAR is not only arranging training programmes for the serving employees of all categories but also providing opportunity of training for retiring employees for better, peaceful and healthy post-retirement life.

During the initial phase of implementation of Policy (2014-16), many perceptible changes were noticed in the ICAR system which became more explicit during the effective phase of Policy implementation (2016-18). On average of 2 years' basis, the number of employees trained were 2617 and 3871 during 2014-16 and 2016-18, respectively as compared to 2409 during 2013-14. Based on the feedback of 2211 Trainees and their respective



Reporting Officers of 106 ICAR-Institutes, the overall Impact of training was assessed as Considerable - Great Extent based on the parameters specified by DoPT, GoI.

The HRM Initiatives and Accomplishments of ICAR during 2014-18 have been ascribed to valuable guidance and support received from Dr S Ayyappan, Former Secretary, DARE & DG, ICAR in the initial phase; and later from Dr T Mohapatra, Secretary, DARE & DG, ICAR and Sh C Roul, Special Secretary, DARE & Secretary, ICAR in the effective phase of Policy implementation. It is noteworthy to mention the support and contribution of all Deputy Director Generals; Assistant Director Generals; Directors of ICAR-Institutes with special mention of all the Directors of NAARM who contributed during this period; and all HRD Nodal Officers of ICAR-Institutes without which the Initiatives could have not been turned into the Accomplishments.

I would like to particularly mention the valuable contributions made by Dr N K Jain, Principal Scientist (HRM Unit); entire IFD team and Sh Kanhaiya Chaudhary, Director (Admn). I am grateful to Dr SK Singh, Project Director (DKMA), Dr VK Bharti, CPO, Sh Punit Bhasin, ACTO (Production), DKMA for designing and publishing this publication in time. The necessary support was also provided by Sh Ajay Kohli, PA and Sh Sanjay Kumar, Assistant from the HRM Unit, ICAR HQs from time to time.

I hope that the information compiled in this publication *iHRM Initiatives and Accomplishments of ICAR (2014-18)* will be useful for further scaling up the Training and Capacity Building of employees of ICAR as well as of other Central Govt. Ministries/Departments.

Dated the 13th August, 2018
New Delhi

(A K Vyas)
Asstt. Director General (HRM) &
Training Manager
Indian Council of Agricultural Research
KAB ñ II, Pusa, New Delhi



ACKNOWLEDGEMENT

THE HRM Initiatives and Accomplishments of ICAR during 2014-18 could be actualize due to valuable guidance and support of Dr S Ayyappan, Former Secretary, DARE & DG, ICAR in the initial phase; and later from Dr T Mohapatra, Secretary, DARE & DG, ICAR; Sh C Roul, Special Secretary, DARE & Secretary, ICAR and Additional Secretary & Financial Advisor (DARE/ICAR) in the effective phase of Policy implementation for taking many strategic initiatives like implementation of Systematic Approach to Training as well as formulation and implementation of ICAR HRM Policy: Training and Capacity Building for all categories of ICAR employees. The contributions of Top Officials of ICAR are highly acknowledged.

The contributions made by all Deputy Director Generals, Assistant Director Generals and Directors of ICAR-Institutes/HQs are commendable in effective implementation of various training functions and the Policy in the Council. The NAARM, Hyderabad has played a key role in the Training and Capacity Building of various categories of ICAR employees. The efforts of HRD Nodal Officers working in various ICAR-Institutes/HQs are sincerely acknowledged for effective and efficient implementation of training functions in their Institutes/HQs.

Sincere efforts of Dr N K Jain, Principal Scientist (HRM) are duly acknowledged for assisting in overall coordination and management of training needs of ICAR, and in bringing out this publication. The contribution of DKMA, New Delhi is also duly acknowledged for printing of this document.

ADG (HRM) &
Training Manager
ICAR



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EXECUTIVE SUMMARY

Indian Council of Agricultural Research (ICAR), an autonomus organization under the Department of Agricultural Research and Education, Ministry of Agriculture and Farmers Welfare, Govt. of India, New Delhi has been laying more emphasis and greater focus on Training and Capacity Building of its employees since 2014. Keeping in view of the importance of training and gaps in training of the employees, ICAR has taken concerted initiatives for training and capacity building of all categories of employees. A brief summary of the major outcomes and initiatives for the last four years are as under:

Major Outcomes

- i Compared to 2013-14, there was considerable improvement in average number of employees undergone trainings particularly in case of Administrative, Technical and Skilled Support Staff, where per cent improvement was 51.7, 180.8 and 1390.0, respectively along with overall improvement of 60.7 % in all the categories of employees on the basis on mean data of 2 years of 2016-18. This may be ascribed to effective implementation of the Policy.
- ii In terms of per cent of total employees 14.1, 10.2, 11.9 and 9.0% more Technical, Administrative including Finance, Skilled Support Staff and all employees, respectively got training opportunities during 2016-18 (on average basis) compared to 2013-14.
- iii Compared to 2013-14, ICAR-Institutes organized 74.6 and 1180.0% more training programmes for Technical and Skilled Support Staff, respectively with overall 7.3% more training programmes organized during 2016-18.
- iv There has been much better capacity utilization of Trainings organized across the categories, as reflected from substantially higher number of employees without commensurate increase in number of Trainings organized.
- v Though the budget enhancement during 2016-18 was only 14.4% over 2013-14 but there was drastic increase (61%) in the overall manpower trained particularly in case of Technical (181%), Administrative (52%) and Skilled Support Staff (1390%) by utilization of the HRD budget most judiciously and economically.

New ICAR Initiatives

- i Training Manager of ICAR i.e. Assistant Director General (Human Resource Management) was appointed in 2014 in compliance with the National Training Policy - 2012 of GoI.
- ii HRM Unit at ICAR Headquarters was created in September, 2014 and made fully functional.
- iii Institutionalized System of Training in ICAR has been developed with the nomination of HRD Nodal Officers in all ICAR-Institutes and attached to the PME Cell.



- i ICAR HRM Policy : Training and Capacity Building for all the categories of employees has been formulated and being implemented.
- i Training Board of ICAR has been constituted for giving overall directions for the implementation of the ICAR HRM Policy in the Council.
- i Systematic Approach to Training has been implemented through Training Needs Analysis (TNA); Design, Development, Implementation, Evaluation, and Impact Assessment of Training.
- i 253 Training Need areas have been identified for all categories of employees (128, 55, 39 and 31 training areas for Scientific, Technical, Administrative including Finance and Skilled Support Staff, respectively).
- i ICAR-Institutes/HQs are developing Annual Training Plan (ATP) for all the categories of employees since 2016-17.
- i Organized Senior Executive Development Programme for 20 Senior Officers of ICAR with 5 days In-country component, and 10 days International Exposure visit.
- i Six Competency Enhancement Programmes on iEffective Implementation of Training Functions by HRD Nodal Officers of ICARi were organized by NAARM, Hyderabad in which 206 officials participated.
- i Forty six new specialized training programmes for Technical staff were designed, developed and organized based on identified Training Needs by 17 leading ICAR-Institutes during 2016-18. In these programmes, so far 1228 Technical staffs (1172 ICAR employees + 56 Non-ICAR employees) participated, out of which 36.6% Technical staff got first time opportunity after joining ICAR service.
- i A new training programme on iAutomobile Maintenance, Road Safety and Behavioural Skillsi was designed, developed and organized by CIAE, Bhopal during 2016-18 for Regular Drivers (Technical grade) of ICAR. In these programmes, 153 regular Drivers undergone training in 06 Batches, out of which 90% Drivers got first time opportunity after joining ICAR service.
- i A specialized training programme for Guest House Incharges/Caretakers on iHospitality Managementi in collaboration with Institute of Hotel Management, Catering Technology & Applied Nutrition (IHMCT&AN), Hyderabad was designed, developed and organized by NAARM, Hyderabad during 2018-19 in which 29 Guest House Incharges/Caretakers of ICAR-Institutes participated, out of which 97% Guest House Incharges/Caretakers attended first time after joining ICAR services.
- i A new training programme on iEnhancing Efficiency and Behavioural Skillsi was designed, developed and organized by NAARM, Hyderabad during 2016-18. So far, 215 Stenographers in various grades were trained in 07 batches, out of which about 73% Stenographers got training first time after joining ICAR services.
- i Training of Skilled Support Staff was initiated and made mandatory to be part of Annual Training Plan of all the ICAR-Institute/HQs. So far, 232 training programmes have been conducted by various ICAR-Institutes/HQs in which 1882 Skilled Support Staff have been trained since 2014.



- i Weekly (one-hour one-day/week) in-house trainings at ICAR HQs was initiated without any financial liability. About 340 administrative staff of ICAR HQs have participated in such training sessions.
- i ICAR is not only arranging training programmes for the serving employees of all categories but also provide opportunity to those employees who are going to retire shortly to acquaint them with the post-retirement benefits admissible to live better, peaceful and healthy post-retirement life.
- i Based on ATP submitted for 2016-17, and Annual Physical and Financial Targets and Achievement Report 2016-17, the monitoring was carried out for all the ICAR-Institutes and feedback was given for proper implementation of ATP.
- i Impact Assessment of training programmes attended during 2016-17 by various categories of employees was done. Based on the feedback of 2211 Trainees and their respective Reporting Officers of 106 ICAR-Institutes, the overall Impact of training was rated as Considerable - Great Extent.
- i Training Management Information System is being developed for effective tracking of different aspects of training.
- i Training details of about 8000 employees of various categories has been updated in the ERP system of ICAR.
- i A chapter on iTraining and Capacity Buildingi has been introduced in the Annual Report of all ICAR-Institutes and DARE/ICAR since 2016.
- i Almost 100% paperless communication has been achieved by the HRM Unit with all 110 ICAR-Institutes/HQs and other non-ICAR Institutes since 2016.
- i Created and operationalized a WhatsApp group named as eHRD Nodal Officers-ICARi since 2016 which remains live for 24 x 7h for exchange of training related information among all ICAR-Institutes.

Other Initiatives

- i NAARM, Hyderabad organized 56 training programmes in which 1501 participants attended various capacity building programmes during 2013-14 while based on 2 yearsi average, number of training programmes organized were 40 and 56 during 2014-16 and 2016-18, respectively in which 1590 and 2492 trainees participated.
- i Based on TNI, ICAR organized 07 new training programmes for Scientific staff in which 127 Scientists (109 ICAR employees+ 18 Non-ICAR employees) in various grades participated during 2017-18. About 25% got training first time after their FOCARS training.
- i Organized 06 Leadership Workshops for Senior Officers of ICAR/ASRB in which 95 such officers participated.
- i Two days Training Workshop for Vigilance Officers of ICAR has been designed by NAARM, Hyderabad and scheduled on 31 October - 01 November, 2018 .



- i New training programme on 'Farm Management' was designed and organized by IIFSR, Modipuram during 2016-18 in which 93 Technical staff associated with farm/Farm Manager were trained.
- i Thirty five Technical staff associated with Library from ICAR Institutes and 01 from SAU were trained in training programme on KOHA by NAARM, Hyderabad during 2017-18, out of which 89% attended first time.
- i Customized 06 training programmes were organized by competent ICAR-Institutes for Administrative staff in which 165 Administrative staff including finance undergone training during 2017-18.
- i Two Training Programmes on 'Establishment and Financial Matters' were organized by NAARM, Hyderabad for Assistants/UDCs of ICAR in which 67 officials participated during 2016-17.
- i NAARM, Hyderabad also organized two training programmes on 'Establishment and Financial Matters' for Under Secretaries, SAOs, SFAOs, AOs & FAOs of ICAR in which 62 Officers of such category participated.
- i Training Programme on 'Reservation in Service including Reservation Roster and Reservation Register' was organized by NAARM, Hyderabad during 2016-17 in which 30 officials of ICAR participated.
- i Generated a sum of Rs 30.00 lakh through participation of employees particularly from SAUs, CAUs, Central/State Govt. and ICAR funded KVKs during 2017-18.



1. Introduction

Indian Council of Agricultural Research (ICAR) is an autonomous organization under the Department of Agricultural Research and Education, Ministry of Agriculture and Farmers Welfare, Govt. of India with the Headquarters at New Delhi. It is a scientific Research & Development organization involved in scientific innovations and technology development in the field of agriculture and allied sciences through its 110 Institutes spread over the entire country. ICAR is served by about 19, 200 employees under four different categories namely Scientific, Technical, Administrative including Finance and Skilled Support Staff. Developing competency of each employee of different category as per National Training Policy - 2012 of GoI is a great challenge for an organization like ICAR. This needs concerted and focused initiatives to enhance the efficiency and effectiveness of each employee through various training and capacity building programmes.

Training is a pro-active systematic process of educating and developing the organization's human resource so that they have the desired knowledge, skills, attitude and understanding needed to manage their present and future jobs/roles with enhanced individual and organizational performance (Fig. 1). Training is a very important activity for an organization, be it private or public. It is fruitful to both the employer and the employees of an organization. An employee becomes more efficient and productive if he/she is trained well through proper training and capacity building programmes. Organizations have grown to understand this over the past few decades and have started giving due attention to it, along with the required budgets. With the advent of globalization, technological and information revolution, it has become imperative for the Organizations to have a well-trained staff in order to achieve the Organizational Vision, Mission and Goals.

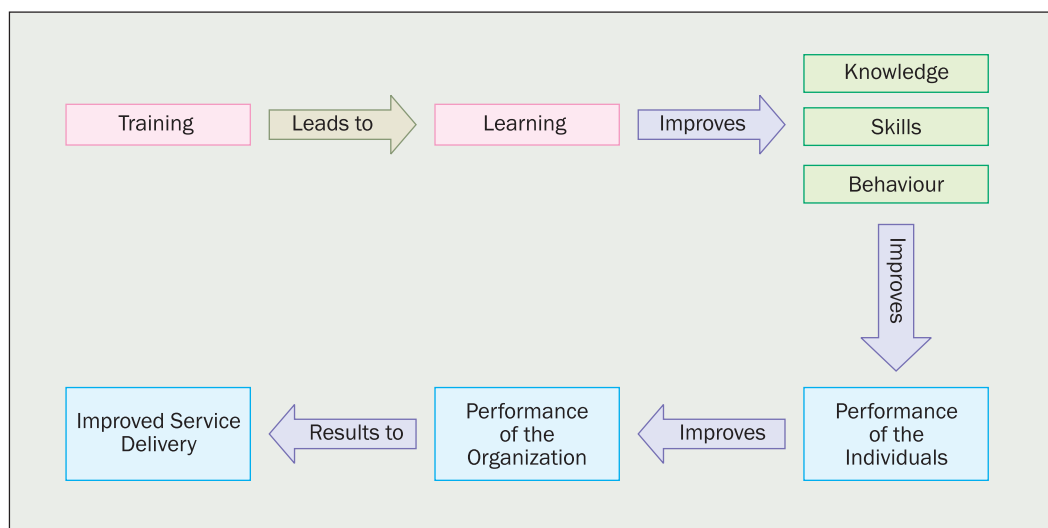


Fig. 1: Training and its benefits



Training is vital for an organization owing to following reasons (DoPT, 2016):

- i In the dynamic environment and scenarios, Organizations need to update themselves continuously in order to meet ever-increasing customer demands. Many Organizations which did not change to keep up with the times have perished and turn redundant. The continuous updating requires proper training.
- i Technological revolution has led to continuous pressure on the Organizations' learning capacity. Those who adapt and welcome new technologies emerge as market leaders. Organizations can achieve this through continuous training.
- i Today's world has emerged as a global village and the entire earth has become a small place and no state or country is isolated and escapes from its outcome. Countries are constantly impacted by global economic, sociological and cultural changes and the trends in every aspect of life. The lifestyles are changing and the expectations of the customers/citizens are changing very fast. Hence, in order to meet the ever-increasing demands of the citizens, the Organizations have to continuously train their employees to improve their knowledge, skills and behaviour.
- i Training has greater significance for the public Organization and Departments, as they deal with public at large. The policies they make influence the quality of lives of the citizens and the quality of their service delivery impacts the citizen satisfaction. The ethics, ethos and behaviours of the Government officers decide the brand image of the Government. Therefore, it is mandatory for the public Organizations to be continuously efficient and effective through regular training of the human resources.
- i When a person joins an organization, he/she is raw and not familiar with the relevant Acts, Rules, Regulations and the various financial/administrative/technical codes to be followed in their work, even about the work culture and environment of the Organization. They need to be provided with the appropriate knowledge, skills and behaviours by way of Induction and Orientation Training. Appropriate training is always required whenever there is change in the role, responsibilities and organizational position so that he/she can take up the new challenges in short period of time.

Though the importance of training has been long realized by the private sector but public Organizations are yet to institutionalize training in a focused manner. The following are the commonly observed gaps in training in Government sector (DoPT, 2016)

- i Training programmes are not always designed based on systematically identified training needs.
- i Training programmes are many times generic and not aimed to develop specific competencies.
- i Using adult learning techniques in training programmes is not by design but incidental.
- i Target group for a training programme is not properly identified and nominated. The nomination process does not always guarantee that right persons are nominated for right training. Many a time, the employees that are less occupied with work are sent for



training and the persons with key responsibilities and work are not spared for training by the HoDs.

- i Many a time, training is not given for the lower level and gross-root level employees and no mapping of training needs is carried out at those levels.
- i Training programmes are considered by many trainees as respite from their regular work and not regarded as learning events.
- i There are no proper practices of evaluation of training interventions carried out.
- i Identification of training needs in behavioural and managerial competencies and conducting appropriate training programmes in these areas is uncommon in Government.

The Govt. of India perceived the importance of training since beginning and created a separate Ministry/Department (DoPT). Later, the Indian Council of Agricultural Research has realized to lay more emphasis and greater focus on Training and Capacity Building of its employees since 2014. Keeping in view of the importance of training and gaps in training of the employees, ICAR has taken up following concerted steps for training and capacity building of all four categories of ICAR employees (Scientific, Technical including Drivers, Administrative including Finance and Stenographer Grades, and Skilled Support Staff).

2. Appointment of ADG (HRM) as Training Manager

ICAR realized the importance of Training and Capacity Building of its employees in true sense and for the first time created a designated post of Assistant Director General (Human Resource Management) and appointed the Officer in Joint Secretary Grade in 2014 to act as Training Manager of ICAR as per National Training Policy - 2012 of GoI. The Officer was appointed with the following duties and responsibilities:

- i Overall coordination, implementation, monitoring and management of training needs & policies for the Council
- i Evaluate and advice on all strategic HR needs and requirements of the Council.

Besides, ADG(HRM) was assigned to collaborate with DoPT, GoI from time to time for effective implementation of Training Functions in ICAR which is spread across the Country's length and breadth with about 19, 200 employees of four different Categories.

3. Creation of HRM Unit at Headquarters

The HRM Unit was created at the ICAR Headquarters in September, 2014 for strengthening and facilitating training and capacity building of Scientific, Administrative, Technical and Skilled Support Staff working in 110 ICAR-Institutes/HQs. Gradually, the Unit was strengthened with necessary staff required for effective functioning of the Unit. The Unit is effectively involved in developing the Institutionalized System of Training in ICAR; pursuing Systematic Approach to Training; formulated ICAR HRM Policy : Training



and Capacity Building; performing Training Needs Analysis (TNA) of all categories of employees; Developing Annual Training Plan (ATP) based on TNA; Design and Development of training programmes for all categories of employees; Implementation of Training Programmes for Scientific, Technical including regular Drivers, Administrative including Finance, Stenographer Grades and Skilled Support Staff; Evaluation of Trainings; Monitoring and Assessment of ATP Implementation; Impact Assessment of trainings; Developing Training Management Information System (TMIS) and Maintaining Database of trainings and trained manpower, etc.

4. Development of Institutionalized System of Training

In order to have proper coordination, implementation, monitoring and management of training needs of all categories of employees of ICAR-Institutes spread across the Country, HRD Nodal Officers were nominated by respective Institutes Directors, and attached to PME Cell. Normally, HRD Nodal Officers are Principal Scientists/Head who are quite senior in the Institute and have good understanding of the training needs of employees. The list of such Nodal Officers, who are serving the Institute/HQs is given in the Annexure I. Besides, number of guidelines and advisories were issued with the approval of the Competent Authority in the ICAR to facilitate the Nodal Officers for effective implementation and monitoring of training and capacity building programmes in their respective ICAR-Institute. Such guidelines and advisories have been given in the Annexure II and III, respectively. In order to have uniform budgetary provisions throughout the ICAR system for judicious and economic utilisation of HRD funds by the Organising and Sponsoring ICAR-Institutes, Training Costs/Budget Plan for the Training Programmes organized from HRD fund of the Institute/HQs have been framed and executed with the approval of the Competent Authority in the ICAR (Annexure IV).

5. Formulation and Implementation of ICAR HRM Policy : Training and Capacity Building

For the first time, **ICAR HRM Policy : Training and Capacity Building** has been formulated in sync with National Training Policy-2012 of Government of India and approved for implementation for all categories of ICAR employees. This policy focuses on the tenet of competency-based training for all which means that all cadres should get due emphasis for training and capacity building. The Policy gives guidelines on competency framework; objectives; nature of training; training targets; role of ICAR and training institutions; trainer development; foreign training; funding; implementation, coordination, monitoring and evaluation. It also encompasses model training schemes for scientific, technical, administrative (including finance and accounts), stenographer services and skilled support staff. The Policy envisages for transforming the employees of ICAR by developing strategic human resource management system, which shall look at the individual as a vital resource to be valued, motivated, developed and enabled to achieve the overall Organization's Mission



and Objectives. Though, initiation of implementation of Policy started in later part of 2014 but the effective implementation begin since 2016-17.

The important features of the Policy which have been effectively implemented so far are enumerated below.

- i Training Manager of ICAR to the level of ADG has been appointed for overall coordination, implementation, monitoring and evaluation of training functions in ICAR.
- i HRM Unit at ICAR HQs has been created in September, 2014.
- i HRM Unit of ICAR is acting as Nodal Agency for the coordination and implementation of the Policy and issuing appropriate guidelines from time to time.
- i Institutionalised System of Training has been developed at each ICAR-Institute/HQs.
- i Competencies of the HRD Nodal Officers are being developed by NAARM, Hyderabad in coordination with HRM Unit of ICAR.
- i Training Board chaired by the DG, ICAR has been constituted and started giving overall direction for the implementation of the Policy.
- i Systematic Approach to Training (SAT) in ICAR is being implemented for all categories of employees.
- i Advisories from time to time are issued by HRM Unit for organising training programmes based on Systematic Approach to Training.
- i Cadre Training Plan (CTP) for each category of employees have been designed.
- i Training Needs of all categories of employees have been identified in all ICAR-Institutes.
- i Annual Training Plans (ATP) is being developed and implemented for all categories of employees in all ICAR-Institutes/HQs.
- i Specialised Training Programmes for different categories of employees have been developed and being organised.
- i Six monthly monitoring of implementation of ATP and fund utilisation is being done.
- i Impact Assessment of training programmes has been performed for trainings attended during 2016-17 by about 2211 employees of different categories.
- i Using the services of the Training Institutions like NAARM in outsourcing training.
- i Maintaining the database of trained manpower for future reference in the ERP system.
- i Training Management Information System (TMIS) is being developed to facilitate training and development activities of ICAR.
- i A Chapter on Training and Capacity Building activities in the Annual Report of DARE/ICAR and ICAR-Institutes has been introduced since 2016.

6. Constitution of Training Board of ICAR

As per approved ICAR HRM Policy : Training and Capacity Building, a Training Board under the Chairmanship of DG, ICAR has been constituted and started giving overall direction for the implementation of the Policy. The present Training Board of ICAR is as under:



1. Director General, ICAR	Chairman
2. Secretary, ICAR	Member
3. Three Deputy Director Generals (for 3 years)	Members
4. Director, ICAR-NAARM, Hyderabad	Member
5. Joint Secretary (Training), DoPT, GoI,	Member
6. Assistant Director General (HRM)	Member Secretary

7. Implementation of Systematic Approach to Training

The Systematic Approach to Training (SAT) is a methodology for managing training functions in the Organizations like ICAR. It is an orderly and logical approach for an end-to-end training functions and ensures that the employees are properly equipped with necessary knowledge, skills and behaviours to discharge their duties successfully. For implementation of SAT, Institutionalised System for Training and Capacity Building has been created to plan, monitor and implement the training functions in the ICAR. The SAT is implemented through the following four stages:

- i Training Needs Analysis
- i Design and Development of Training Programmes
- i Implementation of Training Programmes
- i Evaluation of Training Programmes

7.1 Training Needs Analysis

A training need may be defined as the gap between the actual and desired levels of performance that can be bridged through training. Training Needs Analysis (TNA) is the first stage of the Systematic Approach to Training (SAT). This is considered to be the most crucial stage as the further stage depends upon it. If this stage is well done, it can be considered that the training itself is half done. This is because the trainees can easily connect themselves with the actual training, when it is given to them, as the training actually addresses their training requirements. Training needs analysis is a stage, where the requirements of training are identified. As described in the basic tenets above, any training should be imparted to address specific identified requirements (demand-based).

For the first time in ICAR, identification of training need of all categories of employees has been done by all the Institutes during 2015-16 and 2016-17. The Institutes have identified 253 overall training need areas (Annexure VA-D) for all categories of employees (128, 55, 39 and 31 training areas for Scientific, Technical, Administrative staff including Finance, and Skilled Support Staff, respectively).

Immediately after Training Needs Identification (TNI), all the ICAR-Institutes/HQs were advised to develop Annual Training Plan (ATP) for all the categories of employees keeping in mind that about 20-25% employees get opportunity during a year, particularly



those employees who have not got any opportunity of training in last 3-4 years. An Annual Training Plan is a comprehensive training plan to be prepared annually by every Institutes/HQs for all the employees working in the Institutes/HQs before the start of the next financial year (including those who are posted in the subordinate offices or Regional Stations/Centers), irrespective of the Category of such employees. This plan includes the training interventions described in the Cadre Training Plan (CTP) of the Cadre under its exclusive control, and also the training interventions required to develop Institute-specific-competencies in those employees who are posted in the Institution.

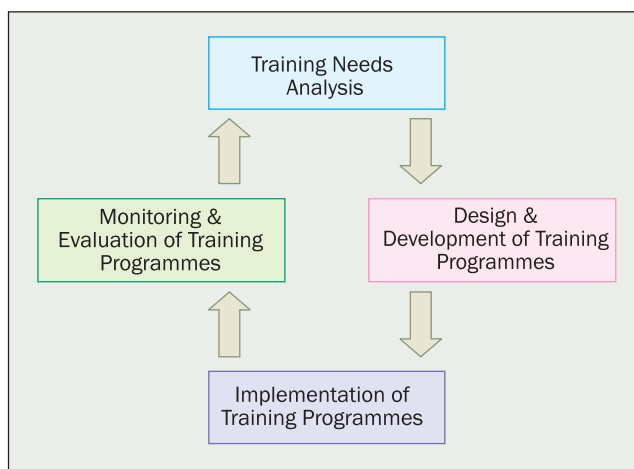


Fig. 2: Systematic Approach to Training

First time in ICAR, all ICAR-Institutes/HQs have been developing ATP based on TNA for all categories of employees since 2016-17. On the basis of ATP developed, the employees are being deputed for various kinds of training programmes either within the ICAR or outside the system.

7.2 Design and Development of Training Programmes

It is important to ensure that suitable training modules are identified, designed and developed to address the training needs of the employees. The content should be properly developed to impart necessary knowledge, skills and behaviour to the trainees.

Suitable training programmes for Technical Staff, Stenographer Grades, regular Drivers and Guest House Incharges/Caretakers of ICAR were lacking in the system as it was always emphasized to train the Scientists being a scientific R&D Organisation. Based on the identified training needs, 17 leading ICAR-Institutes including NAARM, Hyderabad have been identified and 07 specialized training programmes for Scientific staff, 46 new specialized training programmes for Technical staff, 01 new training programme each for regular Drivers and Stenographer grade staff, 06 for administrative staff and 01 for Technical staff associated with Library work got designed and developed during 2016-18. Besides, 01 new training for Guest House Incharges/Care takers was also designed and developed by NAARM, Hyderabad in collaboration with Institute of Hotel Management, Catering Technology and Applied Nutrition (IHMCT & AN), Hyderabad during 2018-19.



7.3 Implementation of Training Programmes

Implementation is taking the results of the development phase into the actual conducting of training. The major output of the implementation phase is trained personnel. Consequent upon designing and development of the training programmes, following training programmes have been successfully organized by competent ICAR-Institutes during 2016-18.

7.3.1 Training Programmes for Scientific Staff

Human Resource Development is the core activity of NAARM, Hyderabad and organized 56 training programmes in which 1501 participants attended various capacity building programmes during 2013-14 while based on 2 years average, number of training programmes organized were 40 and 56 during 2014-16 and 2016-18, respectively in which 1590 and 2492 trainees participated. The capacity building programmes include Foundation Course for Agricultural Research Services (FOCARS), foundation courses for faculty of Agricultural Universities, Executive Development Programmes (EDP), Management Development Programmes (MDP), Refresher Course/Summer Schools/Winter Schools, need based programmes for scientists, technical/administrative staff and off-campus programmes. NAARM also offers online programmes on competency enhancement through Massive Open Online Courses (MOOC) platform (Table 1). The Academy has brought out various research publications (350+); copyrighted IT applications (5 Nos), case studies and process documents (PME guidelines; Innovation/Innovation guidelines/Annual Training Plans for Institutes), which aid in its capacity building initiatives and policy prescriptions. A comparison on HRD activities at NAARM, Hyderabad since 2013-14 onwards is given in Table 1.

Table 1. Capacity Building Programmes Organized by NAARM, Hyderabad since 2013-14

Type of Programme	2013-14		2014-16		2016-18	
	No. of Programme	No. of Participant	Av. no. of Programme	Av. no. of Participant	Av. no. of Programme	Av. no. of Participant
FOCARS (ARS Scientists)	02	228	02	314	02	88
Foundation Course (Faculty of Ag. University)	00	00	01	58	02	96
Executive Dev. Prog. (EDP)	02	26	02	33	01	09
Management Dev. Prog. (MDP)	04	104	03	90	04	74
Refresher Courses/Summer Schools	03	96	03	61	01	13
Need Based Programmes for Scientists/ Technical/ Admn staff	15	334	17	323	38	990
Off-campus Programmes	29	699	10	382	07	226
Massive Open Online Courses (MOOC)	00	00	01	318	01	996
International Programmes	01	14	01	11	00	00
Total	56	1501	40	1590	56	2492



Based on TNI, suitable new training programmes for Scientists were organized during 2017-18 (Table 2). In these 07 training programmes, 127 Scientists (109 ICAR employees+ 18 Non-ICAR employees) in various grades participated. About 25% got training first time after their FOCARS training.

Table 2. New Training programmes for Scientific staff organized during 2017-18

Title of training programme	Organizing Institute	Duration	Participants (No.)	Participants attended training first time (No.)
Advanced Remote Sensing and GIS Applications in Integrated Land Resource Management	NBSS & LUP, Nagpur	2 weeks	13	3
Tools and Techniques of Analysis of Biomolecules	IARI, New Delhi	2 weeks	15	5
Experimental Designs and Statistical Data Analysis	IASRI, New Delhi	10 days	16	8
Advances in Simulation Modeling and Climate Change, Research towards Knowledge Based Agriculture	IARI, New Delhi	3 weeks	21	3
Recent Advances of Bioinformatics in Agricultural Research: A Practical Perspective	IASRI, New Delhi	3 weeks	16	3
Genomics-assisted Breeding for Crop Improvement	IARI, New Delhi	3 weeks	25	5
Management of Plant Genetic Resources	NBPGR, New Delhi	2 weeks	21	5
		Total	127	32 (25%)



Training of Scientific staff at IARI, New Delhi



Training of Scientific staff at NBPGR, New Delhi

7.3.2 Leadership Workshops for Senior Officers

Managing of people and relationships at work place is one of the most important skills required in order to enhance organizational achievements. In order to develop this skill, one needs to understand the personality of one's self, others - as individuals and groups,

and also organizational issues impacting people at work. In the organizational context, people and relationships management has many consequences. Improper management results in the reduction of performance efficiency, effectiveness, productivity and communication of employees. When performance efficiency suffers, the quality of the overall organizational environment deteriorates. A deterioration of the organizational environment is accompanied by deterioration in organizational performance. It will have adverse impact on the individual in terms of low morale and poor work relations. People who are chronically having difficulties are lacking in energy and commitment. They may find it hard to concentrate on any one task and cannot be relied on to do their job share. Understanding people and successfully interacting with them increases organizational efficiency and effectiveness.



Leadership Workshop at NASC, New Delhi

It was felt appropriate to reflect on and renew the people management skills of the top management personnel of ICAR/ASRB, sensitize them on human resource related issues and resolve related operational issues. Therefore, HRM Unit of ICAR headquarters in collaboration with NAARM, Hyderabad organized six one day leadership workshops on iEnhancing organizational productivity through management of people at workî for Top Officials right from Deputy Director Generals; Asstt. Director Generals; Directors, Joint Director, Professors, Principal Scientists and Heads of Division of ICAR-Institutes located at Delhi; Deputy Directors, Senior Finance & Accounts Officers, Deputy Secretaries and Directors at headquarters and ASRB. In these workshops, 95 such officers participated.



Leadership Workshop at NASC, New Delhi

7.3.3 Senior Executive Development Programme for Senior Officers with International Exposure

Training and Capacity building is essential for improving efficiency and effectiveness of the individuals even for Senior Officers, consequently leading to overall efficiency and effectiveness of the organization and its development and success. Organizational effectiveness is enhanced through enhancement of managerial competence and skill development of the Officer. Wider exposure enhances leadership capacities, competence, skills to improve the organizational efficiency to harness the power of science and innovation for food security, food safety and farmer prosperity under diverse environments of the globe. Therefore, visits to research production and processing facilities and government departments for gaining insights on good practices in agriculture and allied disciplines in other countries has good sense.



In other Central Government Organizations, the Executive Officers get an opportunity of training in India and abroad. Similar types of opportunities were not available to the Senior Officers of ICAR. First time, International exposure visits (China, Malaysia and Thailand/Singapore, Australia and New Zealand) of 20 multidisciplinary Senior Scientific and Administrative staff together was organized as part of iSenior Executive Development Programme on Developing Effective Organisational Leadership for Senior Officers of ICAR by ASCI, Hyderabad in coordination with NAARM, Hyderabad and HRM Unit, ICAR HQs. The programme was envisaged to enhance leadership capacities, competence, skills of senior research managers and officers to improve the organizational efficiency. Overall, 20 Senior Officers in 02 batches with In-country component (ASCI, Hyderabad) and International Component (China, Malaysia and Thailand (15-24 April, 2018)/Singapore, Australia and New Zealand (19-29 May, 2018) participated.

Through In-country programme at ASCI, Hyderabad, participants could be able to learn essentials of leadership, characteristics of effective leaders; performance management; dynamics of team building; emotional intelligence and leadership; transactional leadership; role of interpersonal skills; essentials of communication; strategy management; time management; dynamics of administration, etc. After having exposure visits to China, Malaysia and Thailand participants realized



Participants visiting CAAS, Beijing

that Modern Agriculture Technology Park can be replicated in and around metros of India to create value chain; Soilless medium can be effectively utilized for enhancing productivity, profitability and diversity; Application of good agricultural practices in India; New dimensions of Agri-innovation in vertical farming of crops like Sweet Potato, Eco-office and park, hydroponics can be explored; Taking protected cultivation of vegetables and flowers to next level; Developing competitive & comprehensive system of farming (Farmer- Govt.-Private Sector); Developing the concept of Plant factories to make it effective; Effective IP management & commercialization; Linking research to commercial application; Effective value addition of products for profit maximization; Effective delegation of role & responsibilities for organizational effectiveness; Systematization and effective management of work; Effective resource management; Effective time management; Respect for Labour & person; Developing entrepreneurship to establish a successful enterprise of par excellence, etc.

After having exposure visits to Singapore, Australia and New Zealand, participants learnt about efficient use of land resources; rehabilitation of land from sea; greening the country; plant residue recycling; conserving natural resources; multiple uses of ports, etc. in Singapore. They had the opportunity of learning at Australian Centre for Field Robotics, Protected Agriculture and Climate Resilient Agricultural Facilities, Climate Controlled

Chamber for Tree Studies, Ecosystem Services, Australian Centre for International Agricultural Research (ACIAR), Fern Hill Park, and Large Dairy Farm at Palmerston North. The participants opined that the research collaboration in Agricultural Engineering with respect to Artificial Intelligence application can be done with the University of Sydney; ICAR-Institutes / State Agricultural Universities (SAUs) may take up Joint Ph.D. Programmes in protected agriculture, precision agriculture, climate change situation in silviculture, silvipastoral, soil studies areas at Western Sydney University; ICAR may have collaborative competitive research grant proposals with Australian Research Council; linking research Institutions with certification agencies, industry and Government regulatory agencies for studies on traceability and standards as per SPS and TBI agreements; establishing a global agriculture market intelligence unit in ICAR; creating a bio-security cell at ICAR to link research Institutes with industry, farmers bodies and regulatory bodies, etc.



Participants visiting Australian Centre for Field Robotics, University of Sydney, Sydney

7.3.4 Competency Enhancement Programmes for HRD Nodal Officers

The Human Resource Development activities of ICAR-Institutes are being implemented by HRD Nodal Officers who handle HR activities including various training functions at their respective Institutes. ICAR plans for competency enhancement of these HRD Nodal Officers for effective coordination, implementation, monitoring and evaluation of trainings at the Institute level. In order to implement the training functions in the Institutes/HQs effectively and efficiently, six Competency Enhancement Programmes on 'Effective Implementation of Training Functions by HRD Nodal Officers of ICAR' were organized by NAARM, Hyderabad in which 206 officials participated.

The Nodal Officers were exposed to learn various training functions including developing a System of training in the Institute; pursuing Systematic Approach to Training; performing Training Needs Analysis (TNA) of all categories of employees; developing Annual Training Plan (ATP) based on TNA; Evaluation of Trainings; Monitoring and Impact Assessment of trainings; and Maintaining Database of training and trained manpower, etc.

7.3.5 New Training Programme for Vigilance Officers

Since most of the Vigilance Officers of ICAR-Institutes are Scientists who do not have required competency and confidence to handle vigilance and disciplinary cases, therefore, a two days Training Workshop for Vigilance Officers of ICAR has been designed by NAARM, Hyderabad and scheduled on 31 October-01 November, 2018. This will be a regular programme now and cover constitutional provisions relating to disciplinary proceedings, role of CVO,



misconduct and remedial action, preliminary investigation, drafting of charge sheet, conduct of inquiry, drafting of inquiry report, action on inquiry report, etc. Forty Vigilance Officers from different ICAR-Institutes have been nominated for 2018-19.

7.3.6 New Training Programmes for Technical Staff

Technical staff play a pivotal role in extending research support in the organization. Services offered by the Technical staff help in planning and coordinating the management aspect of research which in turn help in meeting the goals and improve productivity of the research organization. The training programmes are intended to build the capacity of Technical staff through appropriate modes.

Specialized training programmes for the Technical staff were tremendously lacking in the system and they had very limited opportunity of capacity building. Therefore, for the first time, 46 New Specialized Training Programmes were organized based on identified Training Needs by 17 leading ICAR-Institutes during 2016-18 (Table 3). In these programmes, so far 1228 Technical staffs (1172 ICAR employees + 56 Non-ICAR employees) participated, out of which about 36.6% Technical staff got first time opportunity after joining ICAR service.

Table 3. Training programmes organized for Technical staff

2016-17

Title of Training Programme	Organizing Institute	Duration	Participants (No.)	Participants attended training first time after joining ICAR service (No.)
Competence Enhancement Programme on Soft Skills and Personality Development	NAARM, Hyderabad	10 days	43	10
Computer Applications	IASRI, New Delhi	1 week	22	12
Basic Training on Routine Chemical Analysis	NDRI, Karnal	1 week	20	8
Networking: Basics and Management	IASRI, New Delhi	1 week	22	11
Agrometeorological Data Collection, Analysis and Management	CRIDA, Hyderabad	2 weeks	21	13
Food Processing, Packaging and Value Addition of Agricultural and Livestock Produce	CIPHET, Ludhiana	2 weeks	19	9
Microbial Culture Handling and Maintenance	NBAIM, Mau	10 days	16	7
Use and Maintenance of Advanced Instruments in Soil and Plant Analysis	IISS, Bhopal	1 week	23	10
Selection, Adjustment, Operation and Maintenance of Agricultural Implements for Field and Horticultural Crops	CIAE, Bhopal	10 days	30	18
Competence Enhancement Programme on Motivation and Positive Thinking	NAARM, Hyderabad	10 days	34	14
Experimental Data Analysis	IASRI, New Delhi	2 weeks	19	4
Handling and Care of Laboratory Animals	NDRI, Karnal	1 week	11	7



Table 3. Continued (2016-17)

Title of Training Programme	Organizing Institute	Duration	Participants (No.)	Participants attended training first time after joining ICAR service (No.)
Dairy Farm and Milk Processing Plant Management	NDRI SRS, Bengaluru	1 week	10	0
Application of Remote Sensing and GIS in Natural Resource Management	IISWC, Dehradun	10 days	15	0
Principles and Production Techniques of Hybrid Seed in Vegetables	IIVR, Varanasi	2 weeks	21	7
Cyber Security	IASRI, New Delhi	1 week	23	2
Good Laboratory Practices	SRS-NDRI, Bengaluru	1 week	14	4
Statistical Techniques for Agricultural Data Analysis	IASRI, New Delhi	10 days	24	11
Techniques in Microbiology	NBAIM, Mau	2 weeks	10	0
Introduction to Bioinformatics	IASRI, New Delhi	2 weeks	15	6
Principles of Seed Production, Processing, Storage and Quality Assurance	IISS, Mau	10 days	15	8
Good Laboratory Practices	CIFE, Mumbai	1 week	9	0
Competence Enhancement Programme on Motivation and Positive Thinking	NAARM, Hyderabad	10 days	43	8
Identification of Insect Pests/Vectors/their Damaging Symptoms and Management	IARI, New Delhi	2 weeks	20	9
Operation and Maintenance of Improved Implements and Machinery	CIAE, Bhopal	1 week	16	12
Reproductive Health Management of Dairy Animals	NDRI, Karnal	1 week	10	5
Fundamental Concepts and Methodologies for Agricultural Water Management	IARI, New Delhi	1 week	25	16
Precision Agriculture Technologies	IARI, New Delhi	1 week	20	5
Physiological Techniques to Analyze the Impact of Climate Change on Crop Plants	IARI, New Delhi	10 days	14	2
Use of Different Molecular Biology Techniques in Crop Improvement Programme	NRCPB, New Delhi	2 weeks	14	4
Handling, Maintenance of Lab and Field Equipment	CIFE, Mumbai	2 weeks	12	12
Trace Level Analysis of Pesticides, Phytochemicals, Sugars and Organic acids	IARI, New Delhi	1 week	15	2
Precision Instrumentation in Dairy Research and Food Quality Evaluation	NDRI SRS, Bengaluru	1 week	8	1
Appropriate Sampling Techniques Including Sample Preparation and Preservation for Soil, Water, Plant and Air Samples for Various Analyses	IARI, New Delhi	1 week	17	5
Instrumentation Techniques for Analysis of Soil, Plant and Water	IARI, New Delhi	10 days	21	0



Table 3. Continued (2016-17)

Title of Training Programme	Organizing Institute	Duration	Participants (No.)	Participants attended training first time after joining ICAR service (No.)
Good Agricultural Practices (GAPs) for Enhancing Resource-Use Efficiency and Farm Productivity	IARI, New Delhi	2 weeks	26	8
Web-designing, Development and Maintenance using Open Source Software	IASRI, New Delhi	2 weeks	13	0
Commercial Dairy Production	NDRI, SRS, Bengaluru	1 week	6	3
Technology Management and Business Planning for Entrepreneurship Development	NDRI, SRS, Bengaluru	1 week	7	0
Layout and Maintenance of Field Experiments and Recording Observations	IARI, New Delhi	10 days	20	20
ICAR-ERP	IASRI, New Delhi	1 week	23	10
Total			766	283 (36.9%)

2017-18

Title of Training Programme	Organizing Institute	Duration	Participants (No.)	Participants attended training first time after joining ICAR service (No.)
Competence Enhancement Programme on Soft Skills and Personality Development	NAARM, Hyderabad	10 days	27	10
FCV Tobacco Field Crop Management	CTRI, Rajahmundry	1 week	25	25
ICAR-ERP	IASRI, New Delhi	1 week	25	5
Basic Microbiological Techniques for Studying Microbes	IARI, New Delhi	8 days	16	2
Experimental Data Analysis	IASRI, New Delhi	2 weeks	20	8
Selection, Adjustment, Operation and Maintenance of Agricultural Implements for Field and Horticultural Crops	CIAE, Bhopal	10 days	30	12
Microbiological Examination of Seafood	CIFT, Cochin	1 week	21	7
Basic Training on Routine Chemical Analysis	NDRI, Karnal	1 week	11	7
Networking – Basics and Management	IASRI, New Delhi	1 week	23	-
Principles and Production Techniques of Hybrid Seeds in Vegetables	IIVR, Varanasi	2 weeks	18	6
Competence Enhancement Programme on Motivation and Positive Thinking	NAARM, Hyderabad	10 days	37	18
Precision Agriculture Technologies	IARI, New Delhi	1 week	17	2
Application of Remote Sensing and GIS in Natural Resource Management' (ARSGN)	IISWC, Dehradun	10 days	16	2
Computer Application	IASRI, New Delhi	1 week	22	0

Table 3. Continued (2017-18)

Title of Training Programme	Organizing Institute	Duration	Participants (No.)	Participants attended training first time after joining ICAR service (No.)
Layout and Maintenance of Field Experiments and Recording Observations	IARI, New Delhi	10 days	15	4
Instrumentation Techniques for Analysis of Soil, Plant and Water	IARI, New Delhi	10 days	17	7
Hi-tech Propagation and Nursery Management for Production of Quality Planting Material	IIHR, Bengaluru	10 days	10	8
Identification of Insect Pests/ Vectors/ their Damaging Symptoms and Management	IARI, New Delhi	2 weeks	14	4
Good Agricultural Practices (GAPs) for Enhancing Resource-use Efficiency and Farm Productivity	IARI, New Delhi	2 weeks	25	15
Agro Meteorological Data Collection, Analysis and Management	CRIDA, Hyderabad	2 weeks	11	4
ICAR-ERP	IASRI, New Delhi	1 week	7	4
Communication and Scientific Writing	NAARM, Hyderabad	1 week	13	0
Use and Maintenance of Advanced Instruments in Soil and Plant Analysis	IISS, Bhopal	1 week	10	6
Statistical Techniques for Agricultural Data Analysis	IASRI, New Delhi	10 days	11	3
Fundamental Concepts and Methodology for Agricultural Water Management	IARI, New Delhi	1 week	21	8
Total			462	167 (36.1%)



Training of Technical staff at CIFT, Cochin



Training of Technical staff at IASRI, New Delhi

7.3.7 New Training Programme for Farm Manager

Based on the TNA, a new training programme on 'Farm Management' was designed, developed and organized by IIFSR, Modipuram during 2016-18 for the Technical staff associated with farm/Farm Manager. So far, 93 Technical staff associated with farm/Farm



Manager (80 ICAR employees + 13 Non-ICAR employees) undergone training in 04 batches, out of which 22.5% got first time opportunity after joining service. During the current year (2018-19), 35 employees (32 ICAR + 3 Non-ICAR) of such category staff of 31 ICAR-Institutes have participated in the said training programme commenced from 14 September, 2018.

7.3.8 New Training Programme for Regular Drivers (Tech. Gr.)

Training programme for regular Drivers in Technical grades in ICAR was not existing and even it was never thought earlier to have a proper training programme for this group of employees. Besides, automobile maintenance has been identified as one of the important training need area for this category of staff. Further, they are not well versed with the latest skill for automobile maintenance, road safety as well as other related soft skills. Most of the employees in this category did not undergo any suitable training after their joining the ICAR services. Keeping this in mind, for the first time a new training programme 'Automobile Maintenance, Road Safety and Behavioural Skills' was designed, developed and organized by CIAE, Bhopal during 2016-18 (Table 4).



Training of Regular Drivers

So far total 153 regular Drivers undergone training in 06 Batches, out of which 90% Drivers got first time opportunity after joining ICAR service. Such programmes have been appreciated by DoPT. The Drivers were so happy that they collectively facilitated the Director, CIAE and others who were associated with the organization of the programme.

Table 4. Training programmes organized for Regular Drivers

Title of Training Programme	No. of Batches/ Year	Organizing Institute	Duration	Participants (No.)	Participants attended first time after joining ICAR Services (No.)*
Automobile Maintenance, Road Safety and Behavioural Skills	02; 2016-17	CIAE, Bhopal	5 days	37	32(86)
Automobile Maintenance, Road Safety and Behavioural Skills	03; 2017-18	CIAE, Bhopal	5 days	87	80(92)
Automobile Maintenance, Road Safety and Behavioural Skills (Revised)	01; 2018-19	CIAE, Bhopal	1 week	29	25(86)
Total				153	137(90)

* Figures in parenthesis represent per cent Drivers attended training first time after joining ICAR services



Technical session of Regular Drivers at ICAR-CIAE, Bhopal

7.3.9 Training Programme for Technical Staff associated with Library

NAARM, Hyderabad was not getting sufficient participants for the training programme on KOHA for Library staff during the previous years. Hence, it was decided to nominate Technical staff working in various ICAR Institutes/HQs that are associated with Library work by the HRM Unit with the approval of the Competent Authority during 2017-18. Thirty five Technical staff from ICAR Institutes and 01 from SAU were trained, out of which 89% attended first time after joining services (Table 5).

Table 5. Training programme organized for Technical staff associated with Library and related works

Title of Training Programme	Organizing Institute	Duration	Participants (No.)	Participants attended first time (No.)
KOHA for Library Staff of ICAR	NAARM, Hyderabad	5 days	36	32

7.3.10 New Training Programme for Guest House Incharges/Caretakers

Normally, the Govt. Guest Houses are used by all levels of Officers visiting the Organization/Institution for official business. These Guest Houses are usually maintained by untrained Scientific/Technical/Administrative staff, consequently leading to inefficient management of the Guest Houses with unintentional poor reflection of the Organization. In order to have better sense of hospitality and effective management of Guest Houses, it was realized to train Guest House Incharges/Caretakers of ICAR Guest Houses in collaboration with specialized Training Institute. Therefore first time, a specialized training programme for Guest House Incharges/Caretakers on iHospitality Management in collaboration with Institute of Hotel Management, Catering Technology & Applied Nutrition (IHMCT&AN), Hyderabad was designed, developed and organized by NAARM, Hyderabad during 2018-19. In this programme, 29 Guest House Incharges/Caretakers of ICAR-Institutes participated, out of which 97% attended first time after joining ICAR services.



Training Programme on Hospitality Management

7.3.11 New Training Programme for Stenographer Grades

To improve skills and efficiency in discharging functions and providing constructive support in meeting the organizational goals and targets, specialized training programmes for Stenographer Grade ñIII, PA, PS, PPS and Sr. PPS†in the ICAR system were also lacking and had very limited opportunity of capacity building. Therefore, for the first time, a new training programme iEnhancing Efficiency and Behavioural Skillsi was developed and organized by NAARM, Hyderabad during 2016-18 (Table 6). So far, 215 Stenographers in various grades were trained in 07 batches, out of which about 73% got training first time after joining ICAR services.

Table 6. Training programmes organized for Stenographer Grades during 2016-18

Title of Training Programme	No. of Batches/ Year	Organizing Institute	Duration	Participants (No.)	Participants attended first time after joining ICAR Services (No.)*
Enhancing Efficiency and Behavioural Skills for Stenographers, PA,PS and PPS	03; 2016-17	NAARM, Hyderabad	1 week	99	62(62)
	03; 2017-18	NAARM, Hyderabad; CIFE, Mumbai (Off campus, NAARM); NBSS & LUP, RC, Kolkata (Off campus, NAARM)	1 week	92	71(77)
	01; 2018-19	NAARM, Hyderabad	1 week	24	24(100)
			Total	215	157(73)

* Figures in parenthesis represent per cent Stenographer Grade Employees attended training first time after joining ICAR services



Training of Stenographer grades at NAARM, Hyderabad

7.3.12 Customised Training Programmes for Administrative Staff

The Officers in the administrative and finance need to be oriented to take up new challenges and assignments. In the recent past, there have been changes and amendments in the rules and government policies with reference to establishment rules, GFR, etc. Customized training programmes provide an opportunity for the officers of combined cadre of ICAR for mutual interaction and knowledge sharing among them and sharpen the administrative and financial skills to discharge their day to day responsibilities more effectively and efficiently on Establishment Rules, Pension and other Retirement Benefits, Pay Fixation, Reservation in Services for SC/ST/OBC, Ethics and Values in Public Governance, E-Procurement/Purchase Management in Government, E-office, Good Governance and sustainability through HR Practices, Leadership and Performance Management, Communication skills for Manager, Technical Service Rules, etc.

Based on the training need identification, customized training programmes were organized by competent ICAR-Institutes. So far 165 Administrative staff including Finance undergone in 06 trainings during 2017-18 (Table 7).

Table 7. Training programmes organized for Administrative and Finance staff

Title of Training Programme	Organizing Institute	Duration	Participants (No.)	Participants attended first time after joining ICAR Services (No.)*
Refresher Course for Section Officers, AAOs, AFAOs and Assistants of ICAR	NAARM, Hyderabad	1 week	23	11
Establishment and Financial Matters for Under Secretaries, SAOs, SFAOs, AOs & FAOs of ICAR	NAARM, Hyderabad	1 week	19	15
ICAR-ERP	IASRI, New Delhi	1 week	18	7
Refresher Course on Administration and Finance Management for Section Officers, AAOs, AFAOs & Assistants	NAARM, Hyderabad	1 week	50	40
Establishment and Financial Matters for Under Secretaries, SAOs, SFAOs, AOs & FAOs of ICAR	NAARM, Hyderabad	1 week	14	14
Establishment and Financial Matters for Assistants/AOs/JAOs/AF&AOs/SOs of ICAR	CCARI, Goa (Off campus NAARM)	1 week	41	20
Total			165	107(65)

* Figures in parenthesis represent per cent Administrative including Finance staff attended training first time after joining ICAR services



In addition to above, to improve skills and efficiency of Assistants/UDCs of ICAR in discharging functions and providing constructive administrative and technical support in meeting the organizational goals and targets, two Training Programmes on "Establishment and Financial Matters" were organized by NAARM, Hyderabad during 2016-17 in which 67 officials participated. NAARM, Hyderabad also organized two training programmes on "Establishment and Financial Matters" for Under Secretary, SAUs, SFAOs, AOs and FAOs of ICAR, in which 62 officers participated.



Training for Assistants/AAOs/JAOs/AF&AOs/SOs of ICAR at CCARI, Goa

7.3.13 Training Programme on Reservation in Service

One Training Programme on "Reservation in Service including Reservation Roster and Reservation Register" was organized by NAARM, Hyderabad during 2016-17 in which 30 officials of ICAR participated.

7.3.14 Specialized Off-Campus Capacity Building Programme

Specialized Off-Campus Capacity Building Programme for the combined group of scientists, technical and administrative personnel of DRWA, Bhubaneswar was organized by NAARM, Hyderabad in which 26 officials participated.

7.3.15 Training Programmes for Skilled Support Staff (SSS)

This is the category of staff which perform the duties at the grassroot level like field operations; assist in laboratory works; physical maintenance of records; general cleanliness and upkeep of the Section/Unit/Institutes; carrying files and other papers within and outside the building; photocopying; sending FAX; other non-clerical work like diary, dispatch, dak delivery; watch and ward duties, opening and closing the office; any other work assigned by the superior authority, etc. Earlier it was even not thought to provide any sort of training to such category of staff which provide the base for moving the ICAR system forward year after year. Immediately after creation of the HRM Unit, emphasis was given for training

need assessment of all the categories of staff including Skilled Support Staff (SSS). All the ICAR Institutes identified the training needs of SSS during 2015-16 which were updated during 2016-17. Thirty-one training need areas emerged for such category of staff, which is difficult to visualize. Institutes were directed to arrange training programmes in the Institute itself based on TNI and so far 232 training programmes have been conducted in which 1882 Skill Support Staff



Training of SSS of CIAE, IISS and NIHSAD, Bhopal on Basic Computer



Training of SSS of NRCY, Dirang, Arunachal Pradesh

have been trained since 2014. The feedback received from various Institutes is as follows:

- i SSS are doing their job sincerely and timely with great dedication
- ii SSS are feeling themselves as a part of ICAR system and never thought that ICAR will provide such a nice opportunity to them to sit in the conference/seminar halls for getting training.

7.3.16 In-house Training of Employees of ICAR HQs

In order to effectively utilise the services of the competent administrative and finance officers posted at ICAR HQs to train those officials who have doubts or lack of knowledge to deal particular type of files/cases, first time weekly (one-hour one-day/week) in-house trainings at ICAR HQs was initiated without any financial liability. About 340 administrative staff of ICAR HQs have participated in such training sessions.

7.3.17 Training for Retiring Employees for Better, Peaceful and Healthy Post-retirement Life

ICAR is not only arranging training programmes for the serving employees of all categories but also provide opportunity to those employees who are going to retire shortly to acquaint them with the benefits admissible on their retirement; various investment plans where they can park their funds; income tax clauses concerning investment and how to live healthy and happy retired life, etc. Recently, 04 employees (01 Scientist, 01 Technical and 02 Administrative staff) have been nominated, who are going to superannuate shortly, for two days Orientation Training Programme for Retiring Govt. Officials in the Institute of Secretariat Training and Management (ISTM), New Delhi. The major objective of such Training Programme is to train the retiring Govt. officials to live better, peaceful and healthy post-retirement life. This shows the sensitivity and concern of ICAR towards its employees.



7.4 Monitoring of ATP Implementation

Monitoring of ATP implementation by ICAR-Institutes is important to know effective implementation of ATP submitted in the beginning of the financial year by each Institute. The monitoring was done for all the ICAR-Institutes based on ATP submitted for 2016-17 and Annual Physical and Financial Targets and Achievement Report 2016-17. Accordingly, the Institutes were rated based on the criteria shown in the Table.

Rating (% ATP Implemented)	Grading
<20	Extremely poor
20-39	Very Poor
40-49	Poor
50-59	Satisfactory
60-69	Good
70-79	Very Good
80 and above	Excellent

Suitable feedbacks were also given to each Institute based on the monitoring. Consequent on receiving the feedback, all the Institutes have taken care during 2017-18 in effective implementation of the ATP. Normally, they are deputing only those employees whose names are included in the ATP as well as are very cautious in deputing the employee(s) more than once during the calendar year. This is resulting in better training opportunities for all with assurance that the employees will attend the relevant trainings based on their identified training needs. This has also improved the capacity utilization of trainings organised.

7.5 Evaluation of Training Programmes

In Systematic Approach to Training, every training organized should be evaluated against its objectives for its usefulness to the Organization. This enables the Organization to take corrective actions and course corrections in their training management systems. Evaluation is an attempt to obtain information on the effects of training programme and to assess the value of training in the light of that information for improving further training. Evaluation of training is vital in the training process for the following reasons:

- i To determine the extent and degree of a training programme fulfilling its set objective
- i To verify the suitability and feasibility of the objectives set for the training programme
- i To provide feedback on the performance of the trainees, trainers, the quality of training and other facilities provided
- i To identify and analyze whether the training content and training methods are in line with the objectives intended to be achieved
- i To enable improvements in the assessment of training needs
- i To aid the learning process of the trainees by providing the knowledge of results
- i To highlights the impact of training on the behaviour and performance of individuals

In general, the training programmes are being evaluated by all the Organizing Institutes and taking the feedback of the trainees on various aspects of training for further improvement. Such evaluation of trainees and trainers are also sent to HRM Unit, ICAR HQs which are analyzed and assessed to redefine the programmes, its objectives, methodology, training content, suitable type of trainees, logistics and facilities to organize the programme



successfully in meaningful manner. The third party evaluation shall be done in future for better assessment of training programmes.

7.6 Impact Assessment of Training Programmes

The main objective of the assessment of training programmes is to find out whether the given training creating any impact on the job behaviour or performance of the trainees or not. This involves collecting feedback from the trainee himself/herself and his/her immediate Reporting Officer so as to know whether there has been any perceptible improvement in his/her job behaviour and performance.

For the first time, Impact Assessment of training programmes attended during 2016-17 by various categories of employees was done. A total of 106 ICAR-Institutes submitted Impact Assessment Report for 2211 trainees who had attended any training programme during 2016-17 with an average age of 43.5 years and average experience of 16.6 years. Out of 2211 participants, 403 were the female participants. The parameters/proforma developed by DoPT for this purpose was used (DoPT, 2016).

Based on the feedback of Trainees received from different ICAR-Institutes, the overall Impact of training was Considerable - Great Extent with average rating of 3.75/5.00 (Table 8).

Similarly, based on the feedback of Reporting Officers of the Trainees received from different ICAR-Institutes, the overall impact of trainings on Trainees was also Considerable-Great Extent with average rating of 3.55/5.00 (Table 9).

Table 8. Feedback by the TRAINEES on the impact of training on their job

Parameter	Rating out of 5.00
To what extent did the said training address your training needs?	3.83
To what extent can you relate the learning of the training to your job?	3.83
To what extent are you able to apply the learning of the said training in your job?	3.72
To what extent did the training help you to improve your job performance?	3.69
To what extent has been the improvement in your job performance, when you compare the pre-training scenario and the post- training scenario?	3.67
Average rating	3.75

Table 9. Feedback by the TRAINEES' SUPERVISORS (REPORTING OFFICERS) on the impact of training on TRAINEES job

Parameter	Rating out of 5.00
To what extent did the said training address the trainee's training needs?	3.66
To what extent the trainee able to relate the learning of the training to the job?	3.60
To what extent the trainee able to apply the learning of the said training in the job?	3.51
To what extent did the training help the trainee to improve his/her job performance?	3.51
To what extent has been the improvement in the trainee's job performance, when you compare the pre-training and the post- training scenarios?	3.46
Average rating	3.55



Thus, the Systematic Approach to Training is effectively followed in ICAR for all categories of employees right from TNI, Design and Development of training programme, their Implementation, Evaluation and Impact Assessment.

8. HRD Budget Allocation and Utilization

During 2013-14, a sum of Rs 623 lakh was allocated to different ICAR-Institutes/HQs for performing the HRD activities judiciously for all categories of the employees (Fig. 3). Out of this, a sum of Rs 578 lakh was utilized and the effective utilization per cent was 92.8. During 2014-16 (average of 2 years), more or less same budget was allocated and utilized whereas during 2016-18 (average of 2 years), a slightly higher budget i.e. about Rs. 713 lakh was allocated while the utilization was Rs 611 lakh. Though the budget enhancement during 2016-18 was only 14.4% over 2013-14 but there was drastic increase in the number of employees trained (61%) particularly in case of Technical (181%), Administrative (52%) and Skilled Support Staff (1390%) by utilization of the HRD budget most judiciously and economically as evident from Fig. 4-6.

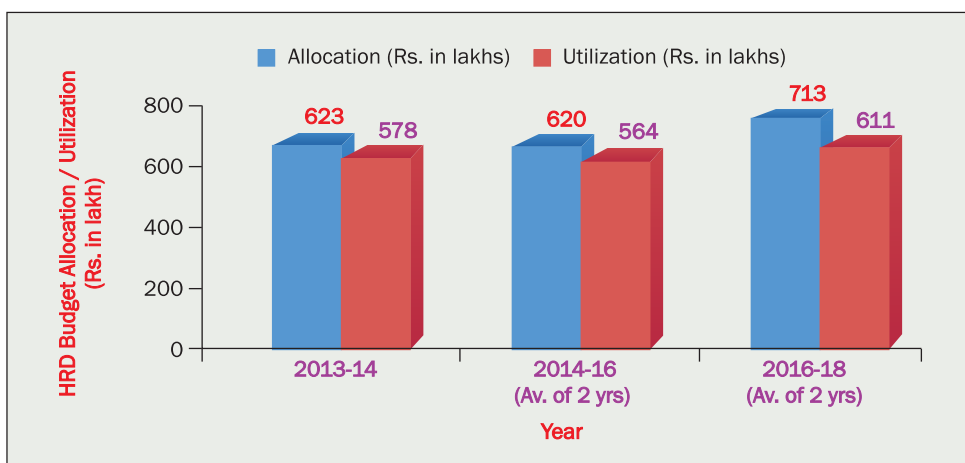


Fig. 3: HRD Fund Allocation and Utilization since 2013-14

9. Major Outcomes of the HRM Initiatives

9.1 Manpower Trained (In Terms of Number)

It is apparent from the average data of 2 years that during the initial phase of establishment of HRM Unit and Policy implementation during 2014-16, a total of 2617 employees were trained in various training and capacity building programmes, out of which Scientists, Technical, Administrative including Finance, and Skilled Support Staff (SSS) were 1269, 524, 474 and 350, respectively. During 2016-18, the number of trained personnel increased drastically in all the categories except Scientific staff due to effective



implementation of the Policy (Fig. 4). A total of 3871 employees were trained, out of which Scientists, Technical, Administrative including Finance, and Skilled Support Staff (SSS) were 1317, 1039, 919 and 596, respectively on the basis of average data of last 2 years i.e. 2016-18. Compared to 2013-14, there was considerable improvement in average number of employees undergone trainings particularly in case of Administrative, Technical and Skilled Support Staff, where per cent improvement was 51.7, 180.8 and 1390.0, respectively along with overall improvement of 60.7% in all the categories of employees on the basis of mean of 2 years data (2016-18).

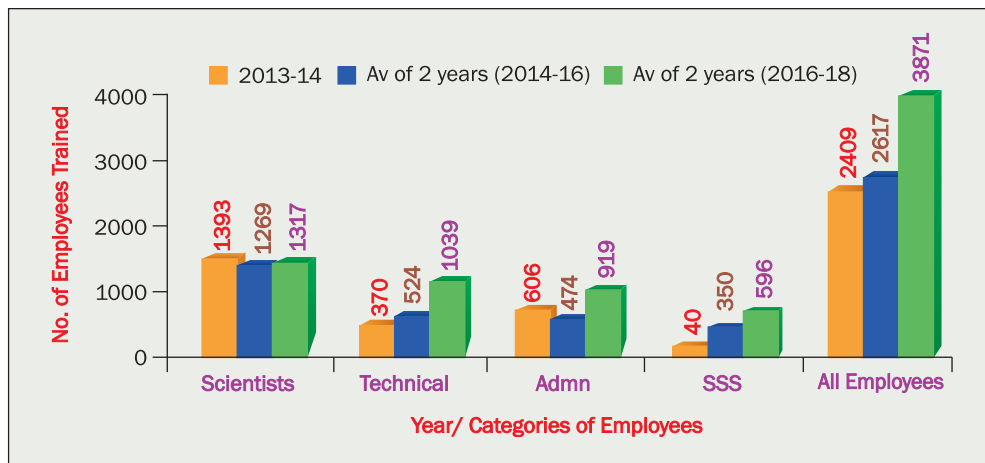


Fig. 4: Improvement in Capacity Building of ICAR Employees since Creation of HRM Unit

Based on 2 years mean data (2014-16), Crop Science Division deputed highest number of Scientists (341) and Technical staff (129) while highest number of Administrative staff was deputed by NRM Division (91) and SSS by Fisheries Science Division (97) for various capacity building programmes (Table 10). During the effective implementation phase (2016-18), Crop Science Division deputed the highest number of all the categories of staff i.e. Scientists (314), Technical (332), Administrative (211) and Skilled Support Staff (148). Overall, maximum average number of employees were trained in Crop Science Division (1005) followed by Horticulture Science Division (595), out of 3,871 employees trained in the ICAR system during 2016-18.

9.2 Per Cent Manpower Trained

In terms of per cent employees trained under each category, 27.1% Scientific, 21.4% Technical, 26.7% Administrative including Finance and 12.6% Skilled Support Staff were trained in various aspects as per their training needs during 2016-18 (on average basis) with overall 21.7% employees across the categories got opportunity for capacity building. The per cent employees trained during effective phase of Policy implementation (2016-18) was higher in all categories of employees than initial phase (2014-16). Though, there was significant



Table 10. SMD-wise number of employees of various categories undergone training

SMDs/HQs	2013-14				Av. of 2 years (2014-16)					Av. of 2 years (2016-18)					
	S	T	Admn	SSS	Total	S	T	Admn	SSS	Total	S	T	Admn	SSS	Total
Crop Sc.	368	62	78	12	520	341	129	57	75	602	314	332	211	148	1005
Hort Sc.	227	94	62	13	396	205	106	73	66	450	190	153	133	119	595
NRM	198	77	96	4	375	202	107	91	47	447	176	197	98	86	557
Ag. Edu.	31	12	28	0	71	34	18	23	12	87	43	39	34	31	147
Ag. Engg.	103	24	78	8	213	78	37	19	17	151	63	54	37	50	204
Animal Sc.	288	24	28	3	343	215	43	69	36	363	252	136	108	91	587
Fisheries Sc.	148	70	50	0	268	149	64	43	97	353	235	99	94	70	498
Ag. Extn.	12	0	1	0	13	23	5	12	0	40	19	9	21	1	50
ICAR HQs	18	7	185	0	210	22	15	87	0	124	25	20	183	0	228
Total	1393	370	606	40	2409	1269	524	474	350	2617	1317	1039	919	596	3871

S: Scientist; T: Technical including Drivers; Admn: Administrative including Finance & Stenographers; SSS: Skilled Support Staff

increase in per cent Technical and Skilled Support Staff trained during 2014-16 compared to 2013-14. As compared to 2013-14, 14.1, 10.2, 11.9 and 9.0% more Technical, Administrative including Finance, Skilled Support Staff and all employees, respectively got training opportunities during 2016-18 (on average basis) (Fig. 5).

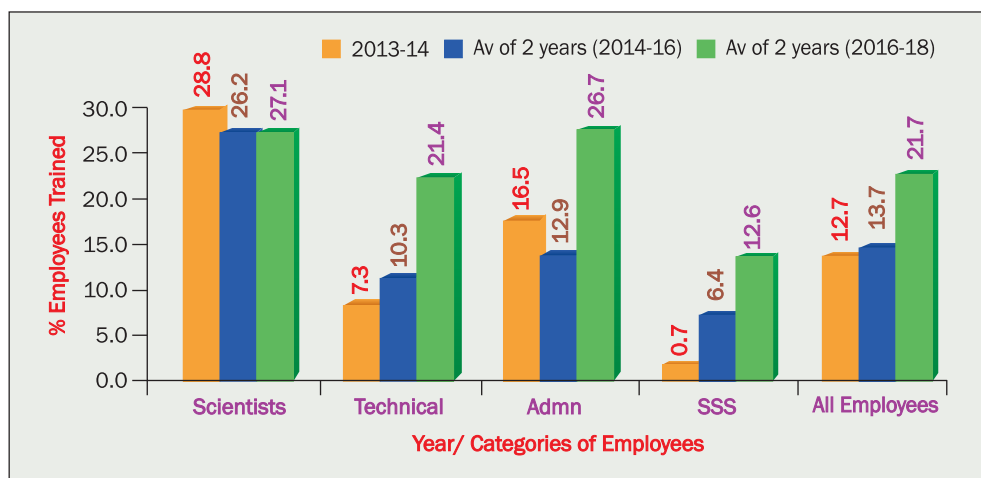


Fig. 5: Per Cent of Employees Trained since Creation of HRM Unit

Among the larger Divisions of ICAR (based on number of Institutes), maximum percentage of employees undergone training and capacity building programmes in Horticultural Science (24.0) followed by Animal Science Division (19.6) on the basis of average of 2016-18 (Table 11). Among the smaller Divisions, Agricultural Education Division deputed the highest number of Technical, Administrative and Skilled Support Staff with overall average of 33.5%. During 2014-16, maximum per cent of employees were deputed



by Horticultural Science Division (17.3) among the larger Divisions whereas among the smaller Divisions, Agricultural Education Division deputed highest number of employees (41.8%) across the various categories.

Table 11. SMD-wise per cent employees of various categories undergone training

SMDs/HQs	2013-14					Av. of 2 years (2014-16)					Av. of 2 years (2016-18)				
	S	T	Admn	SSS	Total	S	T	Admn	SSS	Total	S	T	Admn	SSS	Total
Crop Sc.	23.2	4.2	9.0	0.8	9.6	21.5	8.7	6.6	5.1	11.1	19.4	23.8	22.7	10.7	18.9
Hort Sc.	31.4	12.3	14.4	1.9	15.3	28.2	13.8	16.9	9.7	17.3	26.5	20.9	31.1	19.9	24.0
NRM	25.5	9.2	19.1	0.5	12.9	25.9	12.8	18.0	5.8	15.3	22.3	19.7	20.9	12.5	18.9
Ag. Edu.	53.4	21.8	50.9	0.0	34.3	58.6	32.7	41.8	29.5	41.8	31.3	35.3	29.4	41.5	33.5
Ag. Engg.	41.5	6.3	35.5	3.5	19.7	31.5	9.7	8.4	7.4	13.9	32.1	18.6	25.0	29.6	25.4
Animal Sc.	37.1	2.8	4.5	0.2	8.9	27.7	5.0	11.1	2.3	9.4	38.0	21.4	22.5	7.4	19.6
Fisheries Sc.	27.8	12.2	14.5	0.0	13.7	27.9	11.2	12.4	19.0	18.0	38.5	17.5	29.2	14.1	25.0
Ag. Extn.	26.7	0.0	1.2	0.0	7.3	50.0	11.8	14.1	0.0	21.9	48.1	24.3	29.1	5.0	31.2
ICAR HQs	22.2	7.9	34.0	0.0	26.6	26.5	16.9	16.0	0.0	15.7	31.6	22.9	37.8	0.0	31.7
Total	28.8	7.3	16.5	0.7	12.7	26.2	10.3	12.9	6.4	13.7	27.1	21.4	26.7	12.6	21.7

S: Scientist; T: Technical including Drivers; Admn: Administrative including Finance & Stenographers; SSS: Skilled Support Staff

9.3 Trainings Organized

Based on 2 years' mean data (2016-18), the average number of training programmes organized for Scientists, Technical including Drivers, Administrative including Finance and Stenographers, and Skilled Support Staff were 244, 117, 45 and 64, respectively with overall 470 trainings for all categories of employees (Fig. 6) which is slightly less compared to 2014-16 particularly in case of Scientists and Administrative Staff and also aggregate of all the categories. Data also showed that there is continuous increase in number of trainings organized for Technical and Skilled Support Staff due to more emphasis given on these categories. Compared to 2013-14, ICAR-Institutes organized 74.6 and 1180.0% more average number of training programmes for Technical and Skilled Support Staff, respectively with overall 7.3% more training programmes were organized during 2016-18 (Fig 6).

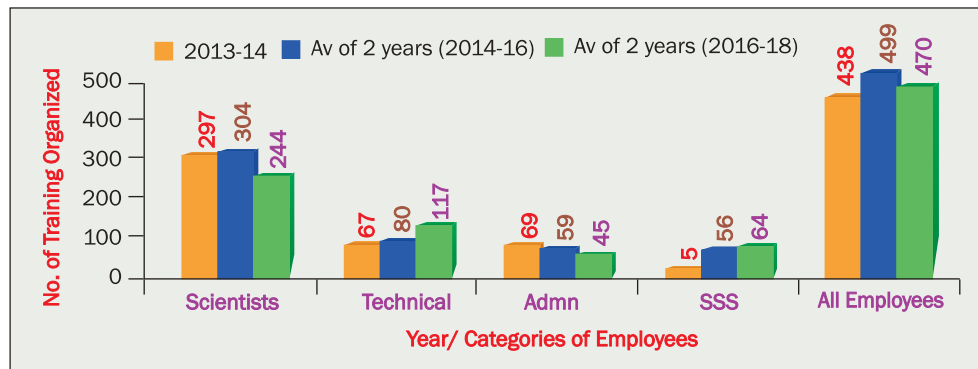


Fig. 6: Trainings organized by various ICAR-Institutes/HQs



Based on 2 years' mean data (2016-18), Crop Science Division organized maximum number of trainings for Scientists (63), Technical (35), Administrative (15) and Skilled Support Staff (25) with overall maximum number of trainings (138) followed by Horticultural Science Division (76) (Table 12). Among the smaller Divisions, Ag. Education Division organized maximum number of trainings (75) for all categories of employees during 2016-18.

Table 12. SMD-wise number of trainings organized for various categories of employees

SMDs/HQs	2013-14					Av. of 2 years (2014-16)					Av. of 2 years (2016-18)				
	S	T	Admn	SSS	Total	S	T	Admn	SSS	Total	S	T	Admn	SSS	Total
Crop Sc.	57	10	13	1	81	67	31	15	37	150	63	35	15	25	138
Hort Sc.	15	4	3	1	23	21	6	4	5	36	30	21	5	20	76
NRM	34	11	7	2	54	44	11	5	2	62	23	12	3	2	40
Ag. Edu.	51	8	13	0	72	41	5	3	2	51	48	14	11	2	75
Ag. Engg.	28	8	6	0	42	35	9	10	1	55	23	11	1	2	37
Animal Sc.	65	6	5	0	76	62	7	5	5	79	32	13	3	7	55
Fisheries Sc.	39	15	10	1	65	22	6	5	4	37	15	6	3	6	30
Ag. Extn.	8	1	0	0	9	10	2	0	0	12	9	5	3	0	17
ICAR HQs	0	4	12	0	16	2	3	12	0	17	1	0	1	0	2
Total	297	67	69	5	438	304	80	59	56	499	244	117	45	64	470

S: Scientist; T: Technical including Drivers; Admn: Administrative including Finance & Stenographers; SSS: Skilled Support Staff

10. Training Management Information System (TMIS)

Training Management Information System is the activity of recording and maintenance of the crucial data related to the training activities that are carried out in each ICAR-Institutes/HQs. As the saying goes, 'What is not recorded cannot be measured and what is not measured cannot be improved'. Therefore, it is required that the various data items pertaining to the training management should be captured and recorded so that the various efficiency/effectiveness factors can be measured. Similarly, if the efficiency and effectiveness factors are measured, then they can be analysed and required improvement measures can be arrived at. Basically, it will ease out the training management process. Training Management Information System helps in tracking different aspects of training. Following are the components of TMIS:

- i Training Application Process (Application)
- i Training Feedback Process (Feedback)
- i Training Evaluation Process (Performance Indicators)
- i Training Needs/Gap Assessment (TNA)

For the first time in ICAR, the responsibility of developing, testing, implementing and executing the TMIS was assigned to IASRI, New Delhi with overall supervision of HRM Unit, ICAR HQs. The basic framework of TMIS has been developed by NAARM, Hyderabad in consultation with HRM Unit. The first two processes have been completed by IASRI, New Delhi so far.



11. Maintaining Database of Trained Manpower

Developing complete and comprehensive database of training details of all categories of employees provide a logical backup for assessing the training needs/gaps and help in planning present and future training programmes. Such a database also helps in effective manpower planning and their effective deployment in the organization. Keeping in view of the crucial importance of this activity, all the Directors of ICAR-Institutes were requested for entering information on training of all the categories of employees of the Institutes as well as Regional Stations. The training details of about 8000 employees of various categories (scientific, technical, administrative and SSS) have been updated in the ERP system of ICAR with the help of IASRI, New Delhi.

12. Resource Generation

As per the ICAR HRM Policy : Training and Capacity Building, ICAR being the apex body of the National Agricultural Research and Education System (NARES) of the country has to play an important role in supporting the development of training capacity in the SAUs, Central Agricultural Universities (CAUs) and ICAR funded KVKs. Since SAUs, CAUs and ICAR funded KVKs are the integral part of NARES, therefore, they may be given opportunity to avail the expertise available with the ICAR system. The NARES including ICAR is committed to solve the existing problems of Indian agriculture and enhancing agricultural production and productivity in the country through science-led and technology-driven farming systems approach. Therefore, it was felt appropriate to extend the training facility of ICAR to the employees of SAUs, CAUs and ICAR funded KVKs in various training programmes for enhancing their competency by charging a nominal fee without putting additional burden on the HRD fund of ICAR. By this way, approx. a sum of Rs 30.00 lakh was generated through participation of employees particularly from SAUs, CAUs, Central/ State Govt. and ICAR funded KVKs during 2017-18.

13. Introduction of Chapter on “Training and Capacity Building”

As per the National Training Policy-2012 of Government of India, it is mandatory for each Ministries/Departments to include a chapter on ‘Training and Capacity Building’ in their Annual Report. Keeping this in view, ICAR has been including a chapter on ‘Training and Capacity Building’ in the Annual Reports of DARE/ICAR as well as ICAR-Institutes since 2016. This highlights the Training and Capacity Building initiatives and the importance attached with this activity by the Organization/Institution.

14. Paperless Communication with Zero Expenditure

A ‘paperless office’ (or ‘paper-free office’) is a work environment in which the use of paper is eliminated or greatly reduced. This is done by converting documents and other papers into digital form, a process known as ‘digitization’. It is claimed that ‘going paperless’



can save money, boost productivity, save space, make documentation and information sharing easier, keep personal information more secure, and help the environment. Further, in order to contribute to the Honorable Prime Minister's vision of Digital India campaign, the importance of paperless communication by HRM Unit of ICAR with all ICAR-Institutes/HQs was realised after the creation of HRM Unit for effective and fast means of communication which is most economical and environmental friendly. The HRM Unit has almost achieved 100% paperless communication with all 110 ICAR-Institutes/HQs and other non-ICAR Institutes since 2016.

15. New Approach to Connect HRD Nodal Officers

WhatsApp Messenger is a cross-platform instant messaging application that allows iPhone, BlackBerry, Android, Windows Phone and Nokia smartphone users to exchange text, image, video and audio messages for free. Therefore, for effective transfer/exchange of ideas and information related to HRD activities among HRD Nodal Officers of ICAR-Institutes, a WhatsApp group named as 'HRD Nodal Officers-ICAR' has been created and operationalized since 2016 and it remains live for 24 x 7 h. This is very effective to flash any important information related to HRD in brief and also shares motivational quotes and videos across all the ICAR-Institutes located in different parts of the country.

16. Epilogue

In last four years (2014-18), ICAR organized training and capacity building programmes from grassroot level staff (i.e. Skilled Support Staff and Drivers) to the Senior Officers of ICAR with international component and also effectively implemented the Systematic Approach to Training. There was very considerable improvement in manpower trained with the effective implementation of Policy during 2016-18. Impact Assessment of training programmes attended during 2016-17 by various categories of employees revealed that the overall Impact of training was Considerable-Great Extent. The HRD funds were utilized very economically and judiciously for the competency enhancement of all categories of employees as per TNI. The Training Management in ICAR has been revitalized and energized to address the need of the employees to achieve the organizational Vision and Mandate effectively.

The Secretary, DARE & DG, ICAR shared the HRM initiatives taken in ICAR during 2014-17 in the Conference of Heads of ATIs and CTIs organized by DoPT, Govt. of India on 4th December, 2017 at CSOI, New Delhi. The initiatives and accomplishments were highly acknowledged and recognized. Consequently, a decision was taken in the Conference that *'Training Programmes for the categories who are never exposed to training (Class IV/ Drivers etc.) should be developed and implemented to develop Knowledge, Skills and Attitude'*.

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**INDIAN COUNCIL OF AGRICULTURAL RESEARCH
KAB-II, Pusa, New Delhi**

F.No.2-2/2015-HRM/20-132

Dated the 4th March, 2016

To

The Director/Project Director of all Research Institutes/Project Directorates/ATARIs and National Research Centres.

Sub.: Guidelines for HRD Nodal Officer for Training Functions Implementation

Sir/Madam,

In order to facilitate effective implementation of training functions at the ICAR-Institutes for training and capacity building of employees of different categories, following guidelines have been formulated for HRD Nodal Officer for strict compliance by the Institutes:

- i. Identify a Principal Scientist as HRD Nodal Officer for the Institute and associate him/her with the PME Cell. In case of availability of only one or two Principal Scientist at the Institute, Senior Scientist may be nominated as Nodal Officer.
- ii. HRD Nodal Officer shall not be changed before 3 years unless there is very strong reason to do so. Moreover, it is desirable to get the consent of the Training Manager of ICAR i.e. ADG (HRM) for any such changes.
- iii. HRD Nodal Officer should not be over burdened with other responsibilities and should be allowed to focus on implementing training functions at the Institute.
- iv. Co-Nodal Officer may also be identified and associated with the HRD Nodal Officer for smooth coordination and implementation of HRD activities.
- v. A separate HRD Cell with basic infrastructure and manpower may be created in case of larger Institutes, where number of employees is more than 300.
- vi. HRD funds allocated to each Institute are exclusively for training of all categories of employees and should not be utilized for attending Seminar/ Symposium / Conference /AICRP Workshop, etc. All expenditures incurred in organizing training programme for ICAR employees or deputing employees for getting trained can be included under HRD head.
- vii. About 20-25% employees of each category should get the opportunity of training in a year, particularly who have not got opportunity in last 3-4 years, based on Training Need Assessment (TNA) and Annual Training Plan (ATP).



- viii. ATP for all categories of employees based on TNA shall be ready by 25th March and submit to Director, NAARM and ADG (HRM), ICAR HQs by 31st March of each year.
- ix. Half yearly report of physical and financial progress shall be submitted to ADG (HRM) by 10th October for the first half year (April-September) and by 10th April for the second half year (October-March).
- x. All training proposals should be processed by the HRD Nodal Officer only for seeking approval of the competent authority.
- xi. ATP for all categories be placed on the official website of the Institute as separate entity.

It is, therefore, requested you to ensure the implementation of above guidelines for effective coordination, implementation, monitoring and evaluation of trainings at the institute level.

This has the approval of Secretary, DARE & Director General, ICAR.

-Sd-

(AK Vyas)
ADG (HRM)

Copy forwarded to:

1. Sr. PPS to Secretary, DARE & DG, ICAR
2. PPS to Addl. Secretary, DARE & Secy., ICAR
3. PPS to Addl. Secretary & FA, DARE/ICAR
4. All DDGs, ICAR
5. Dy. Secy., Work Study, ICAR



भारतीय कृषि अनुसंधान परिषद
INDIAN COUNCIL OF AGRICULTURAL RESEARCH
कृषि अनुसंधान भवन-II, नई दिल्ली-110 012
Krishi Anusandhan Bhawan-II, New Delhi-110 012

F.No.2-2/2015-HRM

Dated: 20.05.2016

CIRCULAR

Sub.: General Points of Consideration for Smooth Implementation of Training Functions

The Council has established HRM Unit at ICAR HQs with the objectives of overall coordination, monitoring, and implementation of HR policies, management of training needs as well as to evaluate and advice on all strategic HR needs and requirements of the Council. The HRM unit has been guiding and supporting the Institutes from time to time for effective and timely implementation of training functions. In order to bridge the gaps in organizing, coordination, implementation and monitoring of the training related activities based on systematic approach to training, following points are to be considered by the ICAR Institutes/HQs:

1. Training Need Assessment shall be done for all categories of employees by involving concerned employee, Reporting and Reviewing Officers, and HRD Nodal Officer of the Institute/HQs.
2. Only regular employees of ICAR of all categories should be part of Annual Training Plan (ATP) based on identified training needs.
3. Only 1-2 skill deficient areas relevant to the discipline/job/personality or leadership development are to be identified for an employee and reported in the prescribed format.
4. One employee shall not be given more than one training in a year normally, there may be exceptions due to emergent needs identified by the Director of the Institute. It should be ensured that the training acquired has been appropriately utilized before nominating for another training.†
5. Normally 25% employees be considered for training in a year and another 25% employees be considered in next year.
6. Skilled Support Staff should also be included in the ATP along with the expected budget to be incurred during that particular year.
7. The trainings of SSS are to be organized either in the Institute itself or any other ICAR Institute located in the same City.
8. Proper format for submission of ATP and Physical and Financial achievements or prescribed format communicated from time to time shall be used.



9. No employee should be nominated to attend the training in the same area in which he/she has already undergone training during the last three years. However, he/she may be nominated for advance training course.
10. It is expected that trainings proposed in the ATP are as per HRD fund allocation and should not exceed the fund availability limits.
11. The ATP should be followed strictly. In case of emergent needs, the ATP may be suitably modified under intimation to HRM Unit, ICAR. However, organizing Institute of training reflected in the ATP may be changed with another suitably competent training Institute at the Institute level.
12. Less than 3 days training for any category shall not be promoted in general because training for capacity building in 1-2 days is not feasible.†
13. HRD Nodal Officer is always expected to show the information to the Director and after having his/her approval mention in all communications sent to the Council that† it has approval of the Director of the Institute, particularly whenever a† new information is submitted to HQs.
14. HRD Nodal Officer should not be changed at least before a tenure of 3 years, as frequent changes hamper the development and progress of HRD activities of the Institute.
15. Every employee shall enter the training information in the ERP system within a week after completion of the training through individual Login ID and Password provided by IASRI, New Delhi. In case of any difficulty, contact at the mail and phone no.: icarerphelp@iasri.res.in, support.erp@iasri.res.in; 91-11- 25842274, 25842275, 25842276. TADA bills of employeesí undergone training shall be processed only after confirmation of the entry of training details in the ERP system by the HRD Nodal Officer.
16. A brief note alongwith photographs of any kind of training organized by the Institute may be sent to Director, DKMA for placing on the ICAR website, with a copy to HRM Unit within 2-3 days of organizing the training.
17. The information in hard copy shall not be sent to HRM Unit until and unless it is specifically requested. The HRM Unit has almost achieved 100% paperless communication with the Institutes.

Save paper for the future and support Green and Clean India Drive!

Sd/-
(AK Vyas)
ADG (HRM)

Distribution:

1. All Directors of Institutes
2. Deputy Secretary (TS & WS), ICAR HQs, New Delhi
3. Sr. PPS to Secretary, DARE & DG, ICAR, New Delhi
4. All HRD Nodal Officers of Institutes



मानव संसाधन प्रबंधन एकक
भारतीय कृषि अनुसंधान परिषद
कृषि अनुसंधान भवन- II, पूसा, नई दिल्ली-110012

No. 4-10/2016-HRM/157

Dated the 30th May, 2018

OFFICE MEMORANDUM

Sub: Training costs/Budget plan for programmes to be organized by ICAR-Institutes for ICAR employees (from HRD Fund of ICAR-Institutes)

The Competent Authority of ICAR has approved the Training costs/Budget plan for programmes to be organized by ICAR-Institutes for all the categories of ICAR employees from HRD fund of ICAR-Institutes in order to have uniform budgetary provisions throughout the ICAR system with the judicious and economic utilization of HRD fund of Organizing and Sponsoring Institutes. This is effective from the financial year 2016-17:

Operational Head/Item of Expenditure

Travel Cost	Rate	To be borne by
i. TA for participating trainees	Actuals as per entitlement	Sponsoring Institute of the trainee
ii. DA for participating trainees	As per entitlement	-do-
iii. POL including hiring of vehicle for educational tour/study visit/ field visit, etc. in case of non-availability of institute vehicle	Actuals	Organizing Institute of training
Boarding and Lodging		
i. Participating trainees	Actuals as per entitlement	Sponsoring Institute of the trainee
ii. For outstation Non-ICAR Resource Persons/SAUs (if required)	Actuals	Organizing Institute of training



Travel Cost	Rate	To be borne by
Training Materials		
i. Stationery and supply of supportive print and electronic literature, books, cost of detailed report, registration kit, etc. to be provided to the trainees	Up to Rs. 1000/- per trainee	Organizing Institute of training
ii. Consumables (chemicals, raw materials, etc.)	Actuals	-do-
Resource person fee/Honorarium		
i. In-house institute employee	Rs. 750/- per session of 75 minutes	Organizing Institute of training
ii. External resource person (if required)	Rs. 1500/- per session of 75 minutes	-do-
iii. *Programme Director (One) and *Programme Coordinator (s) (two)	Max. Rs. 5,500/- per programme: Programme Director: Rs 2500/- Programme Coordinator: Rs 1500/-	-do-
iv. *All other Staff involved in organizing the programme (Secretarial/Clerical/Admin/Finance/Technical/Laboratory staff/class IV) (Max 8 persons)	Max. Rs. 4000/- per programme @Rs 500/- per person	-do-
v. Session tea (2), & Working lunch, etc.	Rs 150/- per day per trainee (all taxes inclusive)	-do-
vi. Inaugural session and valedictory function	Rs 100/- per trainee per function (all taxes inclusive)	-do-
vii. Contingencies including payments for banner, certificate writing/printing, photographs, etc.	Actuals or 5% of total cost	-do-

*Ceiling of honorarium Rs. 2500/- per employee per annum and for higher than this amount up to Rs 5000/- with approval of Secretary, DARE and DG, ICAR following the guidelines for payment of honorarium under FR 46(b) laid down in O.M. No. 17011/9/85-Estt dated 23.12.85 issued by DoPT, New Delhi



This issues with the financial concurrence I.D. No. AS&FA, DARE/ICAR No. 2275/F dated 25.05.2016.

Sd/-

(AK Vyas)
ADG (HRM)

Distribution:

1. All Institutes Directors
2. All DDGs, ICAR, New Delhi
3. Director (Finance), ICAR, New Delhi
4. PPS to Secretary, DARE & DG ICAR, New Delhi
5. PPS to AS & FA (DARE/ICAR), ICAR, New Delhi



Training Need Identification of Employees

Training Need Areas for Scientific Staff

S.No.	Identified Deficient area for training	No. of Scientists
1.	Genomics and Functional Genomics	204
2.	Bioinformatics	170
3.	Research Management	167
4.	Molecular Breeding Techniques	106
5.	Statistical Data Analysis and Experimental Design	103
6.	Leadership Development and Managerial Skills	92
7.	Impact Assessment	78
8.	Proteomics	74
9.	Metabolomics	69
10.	Nanotechnology	61
11.	Next Generation Sequencing	53
12.	Conservation Agriculture	52
13.	Writing and Communication Skills	51
14.	Marker Assisted Selection	44
15.	Simulation Modeling	42
16.	Pesticide Residue Analysis	39
17.	Phenomics	38
18.	Transgenics	38
19.	Instrumentation Techniques	33
20.	Metagenomics	33
21.	Bio-control Agents	33
22.	IPR Issues	32
23.	Germplasm Characterization and Conservation	32
24.	Taxonomy	32
25.	Packaging Tools & Techniques	30
26.	Human Resource Management	28
27.	Computer Applications	27
28.	Stress Management	27



S.No.	Identified Deficient area for training	No. of Scientists
29.	Gender Issues and Mainstreaming	27
30.	Decision Support System	27
31.	PME Management	27
32.	Precision Farming	26
33.	Climate Change related issues	24
34.	Biotechnological Tools and Approaches	24
35.	C-Sequestration	24
36.	Mass Spectrometry Techniques	24
37.	Project Management	23
38.	Nutraceutical and Functional Foods	22
39.	Functional Genomics	22
40.	Scientific Writing and Editing	22
41.	GIS Applications	21
42.	Farming System Research and Modeling	20
43.	Tissue Culture	19
44.	Molecular Biological Techniques	18
45.	Protected Cultivation	17
46.	Stem Cell Technology	17
47.	Advances in Crop Production	17
48.	Isolation, Identification and Mass Multiplication of Native Bio-control Agents	16
49.	Supply/Value Chain Management	16
50.	Water and Nutrient Use Efficiency	15
51.	Econometrics	15
52.	Biodiversity Conservation and Management	15
53.	Use of HPLC,GC-MS,LCMS, etc.	15
54.	Seed Quality Issues	15
55.	Advances in Organic Farming	14
56.	Biotic and Abiotic Stress Management	14
57.	Hyperspectral Remote Sensing and Thermal Imaging	14
58.	Database Management & Digitization	14
59.	Research Methodology	14
60.	Genetic Resource Management	14
61.	Nutrigenomics	14



S.No.	Identified Deficient area for training	No. of Scientists
62.	Computational Biology	14
63.	Phenotyping and related issues	14
64.	Advances in Horticulture	13
65.	Software Applications	13
66.	PHT	13
67.	Allele Mining	13
68.	Advances in Modeling and Climate Change Studies	12
69.	Entrepreneurship Development	12
70.	Advances in Breeding Techniques	12
71.	Bio-safety Issues	12
72.	Gene Expression, Regulation and Silencing	12
73.	SNP Genotyping	12
74.	ICT Applications	11
75.	Double Haploid Production	11
76.	Haploid and related issues	11
77.	Electron Microscopy	11
78.	Advances in Water Management in Crops	11
79.	Soil & Water Conservation and Watershed Management	11
80.	Advanced Soil Survey Techniques	11
81.	Microscopy Techniques	10
82.	High Throughput Analysis	10
83.	Transcriptomics	10
84.	Epidemiology and Disease Surveillance	10
85.	Biosensor Applications	10
86.	Extension Methodologies	10
87.	Web Page Development	10
88.	Knowledge Management	9
89.	Extension Methodologies	9
90.	CAD	9
91.	FMS/MIS	8
92.	DNA Barcoding and Fingerprinting	8
93.	Fermentation Technology	8
94.	Disease Forecasting	8
95.	Chemical Ecology and related aspects	8



S.No.	Identified Deficient area for training	No. of Scientists
96.	Root Architecture and related aspects	8
97.	Entrepreneurship Development	8
98.	Genome Wide Association Studies (GWAS)	8
99.	Advances in Animal Disease Management	8
100.	Sensor Technology-Design and development	7
101.	Omics	7
102.	Writing Case Studies	7
103.	Diagnostic Tools and Techniques	7
104.	Environmental Impact Assessment	7
105.	Cage & Pen culture	7
106.	Livestock Production and Management	7
107.	Micro Array Techniques	7
108.	Advances in Toxicology	6
109.	Recent Advances in Determination of Soil Contaminants	6
110.	Biopesticides	6
111.	Artificial Neural Network	6
112.	Association Mapping	6
113.	RNA Sequencing and Data Analysis	6
114.	Identification of Insects Pests	6
115.	Advances in Fruit Breeding	6
116.	Use of CRISPR/CAS Technology for Genome Editing in Plants	6
117.	Biomass Energy for Future	6
118.	Computer Applications in Agriculture	5
119.	Working Knowledge in Hindi	5
120.	SCUBA Diving	5
121.	Use of Advance Instruments in Nanotechnology	5
122.	Carbon Footprints in Agriculture	5
123.	GHG Emission and Estimation	5
124.	Biodiversity Conservation & Management	5
125.	Drought Tolerance	5
126.	Fish Taxonomy	5
127.	Ecological Modeling	5
128.	Artificial Intelligence	5



Annexure - VB

Training Need Areas for Technical Staff

S.No.	Identified Deficient area for training	No. of Technical Staff
1.	Computer Application and MS Office	373
2.	Farm Management	184
3.	Farm Machinery & Implements- Maintenance and Repair	70
4.	Statistical Data Analysis	68
5.	Fish Biology Studies and Protocols	65
6.	Lab/ Field Equipments Handling and Maintenance	62
7.	ERP (MIS/FMS)	60
8.	Instrumentation Techniques	58
9.	Survey Methods and Data Entry Techniques	43
10.	Tobacco Field Crop Management	43
11.	Procurement of Farm Stores and Dispose Off Farm Produce	42
12.	Personality Development	41
13.	Data Collection	40
14.	Labour Management	39
15.	Vehicle Maintenance	39
16.	Stress Management	36
17.	Seed Production Techniques	36
18.	GIS and Remote Sensing	35
19.	Good Laboratory Practices	34
20.	Human Resource Management	32
21.	Competency Enhancement Programme	28
22.	Auto CAD/CAD Design	25
23.	Dairy Management	24
24.	Web Designing	22
25.	Molecular Microbiology	22
26.	e-Library, KOHA (Library Programme)	22
27.	Identification of Vectors/Foliar Symptoms of New Pathogens and their Surveillance at Farm Level	21
28.	Water Quality Parameters Analysis	21
29.	Data Base Management System	20



S.No.	Identified Deficient area for training	No. of Technical Staff
30.	Scientific Photography & Videography	19
31.	Taxonomy and Statistical Tools	18
32.	Cyber Security	18
33.	Communication Skills	18
34.	Microbiological Analysis of Seafoods†	17
35.	Designing and Layout of Field Experiments	15
36.	Meteorology & Meteorological Data Management	15
37.	Climate Change Influence on Physiological Parameters	15
38.	PME Management	14
39.	Soil Survey and Land Evaluation	13
40.	Driving Skill Improvement	11
41.	Translation and Editing in Hindi/English Technical Reports	11
42.	Soil & Water Analysis	9
43.	ICT in Agriculture	8
44.	Sample Handling & Processing	8
45.	HPLC and GC-Operational, Preventive and Corrective Measures	7
46.	Application of Mass Spectrometry in Food Analysis	7
47.	Packaging Technology	6
48.	Tube well Operation and Maintenance	6
49.	Bio-safety Measures in Disease Investigation Laboratory	5
50.	Post-harvest Technologies	5
51.	Biotechnological Tools	4
52.	Breeding and Culture of Ornamental Fishes	4
53.	Nursery and Plantation Technique	4
54.	Agriculture Extension Techniques	4
55.	Phytoplankton, Zooplankton & Benthos: Analysis and Culture Techniques	4



Annexure - VC

Training Need Areas for Administrative Staff

S.No.	Identified Deficient area for training	No. of Admin. Staff
1.	e-Tendering and e-Procurement/Public Procurement	200
2.	FMS/MIS/ERP	199
3.	Payroll and Pay Fixation	188
4.	Computer Proficiency	150
5.	Noting and Drafting	109
6.	Office Automation	103
7.	Store Management	99
8.	Income Tax related aspects	79
9.	Establishment & Recruitment Rules	65
10.	Pension and Retirement related issues	60
11.	Service Matter related issues	59
12.	RTI related aspects	58
13.	Personality Development and Behaviour Skills	57
14.	Establishment and Financial Matters	52
15.	Budget related aspects	47
16.	Communication Skills	47
17.	Court Cases and Legal Issues	41
18.	Reservation in Service for SC/ST/OBC	40
19.	Office Management	35
20.	Record Management	32
21.	GFR related aspects	30
22.	Vigilance related matter	28
23.	New Pension System	27
24.	Stock, Assets Register and Office Records	23
25.	Team Work	22
26.	Rajbhasha Implementation	20
27.	Leadership and Management Skills	19
28.	ICT Tools	17
29.	Contract Management	16
30.	Work Planning Skills	16



S.No.	Identified Deficient area for training	No. of Admin. Staff
31.	CCS (CCA) Conduct Rules	15
32.	Audit & Accounts related aspects	12
33.	Administrative Matter	10
34.	Condemnation of Articles	10
35.	Stress Management	9
36.	FRSR	9
37.	Role of IO/PO	4
38.	Contingency/Fellowship related aspects	4
39.	e-Office (governance)	4



Training Need Areas for Skilled Support Staff (SSS)

S.No.	Identified Deficient area for training	No. of SSS
1.	Field Operations and Maintenance	250
2.	Diary and Dispatch	181
3.	Nursery Techniques and Management	179
4.	Motivation	120
5.	Laboratory Maintenance Techniques	107
6.	Xerox/Photocopy	100
7.	MS Office /Basic Computer Literacy	98
8.	Office record keeping and maintenance of files	97
9.	Document Binding	85
10.	Personality Development	85
11.	Office Support Services	66
12.	Reading and Writing in Hindi	44
13.	Plant Sampling and Processing	43
14.	Interpersonal Skills and Stress Management	35
15.	Workshop Maintenance	35
16.	Livestock Management	32
17.	Glass House Maintenance	28
18.	Developing Communication Skills	28
19.	Fertilizer Application Techniques	24
20.	Office Building Safety	23
21.	Orchard Management	23
22.	Disposal of Laboratory Wastes	21
23.	First Aid and Fire Fighting	20
24.	Service Rules Awareness	14
25.	Spraying Techniques of Insecticides	14
26.	Fish Biology and Sampling Methods	11
27.	Plant Protection Measures and related works	11
28.	Operation and Maintenance of Drip Irrigation System	11
29.	Hatchery Management	11
30.	Gene Bank Maintenance	7
31.	ERP System	7

