

Agricultural Research and Extension Project
Ministry of Agriculture and Nepal Agricultural Research Council, Nepal

Developing communication strategy for agricultural research in Nepal

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By

Upendra Phuyal

Agricultural Communication Specialist

JV. SEEPORT Consultancy, CMS Nepal & IAAS



SEEPORT Consultancy (P) Ltd.

Kha 1-591 Sachetan Marg, Bhimsengola, Baneshwor

PO Box 3635, Kathmandu, Nepal

Tel: 470305, Fax: 487 793,

seeport@col.com.np

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Introduction

This is the 5th report on agricultural communication component by the consultants as part of the World-Bank-funded Agricultural Research and Extension Project. It focuses on the structure, staffing, audience categorization and strategy development for the NARC's Communication, Publication and Documentation Division (CPDD), and the four regional communication units at Regional Agricultural Research Stations.

Previous report of the consultancy

Report I (Mundy Phuyal report Sept. 99): Focused mainly on identifying major agricultural communication problems and issues that need to be addressed in agricultural communication in Nepal. While these could be seen as problems, we prefer to view them as opportunities for improving the situation.

Through this report we have made a large number of recommendations regarding equipment, skills and linkages in order to improve the functioning of the three institutions Agricultural Communication Division (ACD), Regional Communication Unit (RCU) and Nepal Agricultural Research Council (NARC's) Communication Publication and Documentation Division (CPDD).

Report II (Phuyal, October 99): Partly complemented to first report and in addition focused mainly on identifying communication skills needs for ACD, RCUs and CPDD. In addition, a number of job related communication training courses have been identified for ACD, RCUs and CPDD staff and curricula for some of the most priorities courses have been developed.

Report III (Phuyal, February, 2000): This report presents the major communication technologies recommendations for agricultural research and extension in Nepal. These communication recommendations are concisely accumulated from the previous two reports (Mundy Phuyal report Sept. 99 and Phuyal, October 99) for quick reference action by the concern implementing authorities.

Report IV (Phuyal, March, 2000): It focuses on the structure, staffing, audience categorisation and strategy development for the Ministry of Agriculture's Agriculture Communication Division (ACD), and the five regional communication units (RCUs) located at the regional agriculture development offices.

Future plan of action

As recommended by MTR mission, the major future tasks of the communication consultant (s) will be:

1. Organization of participatory workshop to produce information materials
2. Design survey methodology and tools for carrying out impact and effectiveness studies of ACD's mass media programmes

We propose to run a joint ACD/CPDD workshop to produce extension information materials. This one-week workshop will involve NARC scientists, NGO staff, IAAS and extension staff, and the publications staff from ACD, CPDD and IAAS. It will have several purposes:

- To develop a set of extension information materials on agriculture in Nepali, for use by extension personnel in the Departments of Agriculture and Department of Livestock Services.
- To develop a new mechanism for research-extension linkages that can be used by the Agriculture Communication Division (ACD) and the Nepal Agricultural Research Council (NARC) in the future.
- To train ACD and NARC communication staff and NARC scientists in how to develop user-friendly extension materials.
- To improve linkages among NARC, ACD, the Ministry of Agriculture and I/NGOs working in agriculture in Nepal.

The workshop approach can overcome ACD's current problems in obtaining information from scientists, and assist scientists to convert their knowledge into usable information more quickly and easily. Once ACD and

CPDD staff know how to use the approach, they can use workshops in future as a standard procedure for translating scientific and field-based information into extension materials.

Details of the workshop, and a list of tasks required to prepare for it, will be presented separately.

3. Develop curriculum for short courses and arrange training for some of the basic communication skills such as radio and video programme production, publication editing, desk top publishing etc.
4. Internal consultancy to support and facilitate ACD, RCUs, and CPDD to strengthen their information and communication activities.

Institutional focus, Communication, Publication and Documentation Division (CPDD)

NARC is an apex organization taking responsibility for research on various aspects of agriculture and assist government to formulate policies and strategies on agriculture research and development in the country. NARC can contribute to increasing production and productivity only when information and adoptive technologies generated by its research system are successfully transmitted to the potential users, the farmers, I/NGOs and private entrepreneurs etc. Similarly NARC scientists and researcher's abilities to conduct high quality research and generate farmers' problem oriented technologies would be enhanced if they are well facilitated and access to modern information technology.

NARC's Communication, Publication and Documentation Division (CPDD) should be responsible for both enhancing accesses to information technology for the scientists, researchers and communicating research results to the potential beneficiaries. Currently CPDD is performing its role of communicating research findings, providing library services, producing limited types and numbers of publications and providing press releases to mass media. CPDD is already performing its role fairly well, especially considering the limited number of staff, their training and the facilities available. However it has to do a lot to cope with the increasing information need of NARC scientists and communicating agriculture research results to different level of beneficiaries.

CPDD's objectives

- Management, operation and upgrading of NARC's central library to ensure the greater access to scientific information for NARC's scientists and researchers
- Serve as a national repository to information related to agriculture in document and electronic version.
- Communication of NARC's research results to different audience through different communication, channels such as publication, radio, TV, Newspapers, video show, exhibition, seminar, conference etc.

CPDD, at present is performing its responsibility through four units organized under it as central library, publication unit, communication unit and audio-visual unit.

Considering the increasing information need of agriculture scientists and their responsibility to communicate research results to different level of target audience, CPDD would need to focus its activities on most priority area based on the NARC's broad objective. It need to review, revise and refocus CPDD's program and activities to provide effective information services for the production, storage and dissemination of research information.

NARC has to formulate set of communication policies and programme to provide CPDD with a new approach and mechanism to information production and delivery.

Strengthening CPDD

Considering the growing need of information and communication services. CPDD will have to be strengthened its capacity in terms of its staffing, physical facilities, resource allocation and program. Regarding the improvement of NARC's information and communication services, certain long term and medium term strategies have to be formulated and adopted on a phase-wise basis. Some medium term communication

strategies are drawn out here and suggested to be adopted for the gradual improvement of CPDD to cope with the NARC's growing information and communication services.

Building CPDD's staff capacity

Considering the growing needs of information and communication services in NARC system and increasing workload for CPDD, its capacity should be developed in phase wise basis. CPDD's capacity in terms of organization, manpower, equipment, skills and programmes should be strengthened to meet the growing needs of NARC communication, publication and documentation services. Looking for the ten years ahead from now, CPDD's staff strength will be built as of below:

CPDD's staff needs

Position	Number
Admin. And management services	7
Division Chief	1
Accountant	1
Administrative Assistant	2
Store Keeper	1
Driver	1
Messenger	1
Publication Section	7
Publication Officer	1
Senior Editor (Science)	1
Editor (General and Nepali)	1
Desktop and web site publishing Specialist	1
Computer Operator	1
Publication Assistant (Distribution)	1
Artist	1
Public Relation Section	2
Public Relation Officer (PRO)	1
Public Relation Assistant	1
Audio- Visual Section	5
Communication Officer (Audio- visual)	1
Video Editor	1
Production Assistant (Video)	1
Camera man /Video grapher	1
Still Photographer	1
Library Section	5
Librarian	1
Assistant Librarian (AGRIS/ CARIS, CDS/ISIS)	1
Assistant Librarian (Computerizing catalogue, Bibliography)	1
Messenger	2
Total	26

CPDD's function

The main function of CPDD will be to:

1. Enhance the access of information related to the agricultural science to NARC's scientists and researchers through improving database, library services, news clipping and information technology such as internet, email, online information search etc.
2. Processing and value addition to information generated through NARC's research system
3. Dissemination of NARC's research information through different communication media such as publications (paper and electronic format), mass media such as TV, radio, Newspaper, video cassette, slide, exhibits, conferences, seminars exhibition, press releases, farm fair, field days etc.
4. Support to RARS and ARS for their publication and communication activities
5. Research on agricultural communication activities. Initiate research studies on agricultural communication activities including the impact assessment on NARC's current information materials.

CPDD will perform its function and responsibility through four units organized under it. Their role and functions will be as follows:

Publication Section:

- Editing, layout, graphic design and production of:
 - Annual Reports
 - Newsletters
 - Journals
 - Brochures
 - Proceedings
 - Books
 - Booklets
 - Fliers etc
- Designing and updating NARC's web site
- Maintaining and updating NARC's publication mailing list
- Timely distribution of publication
- Preparation of NARC's publication style guide and maintain consistency and standard as per the set style guide
- Helping authors to follow NARC's publication style guide and maintain consistency and quality standard as per the set style guide
- Collect feedback of publications specially of NARC Newsletter and journals from readers and improve the publications accordingly
- Maintain publication exchange system

Public relation and communication Section:

- Keep Cordial relation and functional linkage with media
- Press releases of NARC's research results to different media
- Provide required information to incoming visitors
- Liaison visit to related institutions
- Maintain linkage with related institutions in country and abroad
- Provide support to organizing exhibition, farm fair and field days
- Coordinate and organize talk programmes, seminars, conference etc
- Maintain NARC's exhibition room

Audiovisual Section:

- Operation and maintenance of Audio Visual equipment
- Provide audio visual support and public addressing system to seminar, workshop, conference, meeting etc
- Take photographs and slides of important events, research activities and achievements
- Maintain video cassette, photo and slide archive
- Make arrangement for video recording of important events, research activities and outstanding achievements

- Prepare exhibits, provide support to organizing exhibition, farm fairs and field days at centre as well outlying stations
- Support to RARS and ARS for operation and maintenance of audio visual equipment

Library and Documentation Section

- ◆ Develop and maintain both card and computerized library cataloguing
- ◆ Collect the demand of key books, journals, compendium and abstracts from NARC's scientists and researchers to be acquired for the library
- ◆ Upgrade library through acquisition of key books and journals
- ◆ Keep contacts with other related institutions in country and abroad for the exchange of publications. NARC's annual reports, seminar proceedings and other technical publications could be exchanged with similar publications from other institutions.
- ◆ Provide effective library services such as current content service, photocopying on cost basis, and online search, information searching on AGRIS/CARIS, CDS/ISIS database etc
- ◆ Provide email and internet access to library users.
- ◆ Identify relevant and useful internet sites such as:
 - Online directories and search engines (library staff should be familiar with how to use them).
 - Catalogues of libraries of universities and research institutes abroad.
 - Online versions of research publications, available at many university and research institute web-sites

Communication, Publication and Documentation Unit at Regional Stations

NARC outlying stations (RARS) would require to carry out different information and communication related activities such as dissemination of research results through various communication channels, managing and updating library, organizing seminars, workshop, field days and facilitating researchers to have access to scientific information system. In order to carry out these communication functions, all five RARS would need to have a Regional Communication, Publication and Documentation unit (RCPDU) attached to RARSs.

Therefore, a core team of three to four staff in each centre should be designated to work in RCPDUs. They should be provided with training in development communication skills. They should be given the task of coordinating and implementing communication activities at their station. These tasks may include managing on station and outreach research information, collaborating with CPDD to generate, edit and produce information materials such as brochures, annual reports and research briefs, and managing the station library.

Function of RCPDU

The small team of staff designated at (RCPDU) would facilitate and coordinate the communication, publication and documentation of the research result and information access to the researchers working at the RARSs. Their roles and functions would mainly include:

- Compiling research findings and producing and distributing in the form of periodic and annual reports.
- Contribute to NARC newsletter providing with RARSs technology update. .
- Providing research generated technologies to RCU of RAD and collaborating with radio and video program production.

- Documenting research publications produced in-house and received from out side research institutions.
- Produce proceedings of seminars and workshops organized at regional levels.
- Provide necessary information and regional information base to CPDD to produce NARC's annual reports, newsletter, research briefs, brochures, video film etc.
- Up-dating and managing the station library.
- Organizing talk programme, seminars, workshop, field days, exhibition etc.
- Providing information and organizing programs for visitors.
- Compiling impacts points and circulating to DADO, development project, I/NGO, private sector and farmers in the regions.
- Developing database of recommended and pipelines technologies at regional level.
- Provide on line information search access to RARS scientists and researchers.
- Develop and maintain exhibition room at RARS
- Organize press meet/conference and circulate press release to media when necessary.

Staff need for RARS's communication, publication and documentation, unit

Position	No. of Staff
Communication officer (T6 or S1)	1
Assistant Communication Officer (Audio-visual) T5	1
Assistant Librarian (T5)	1
Publication Assistant (T4 or T5)	1
Total	4

Staff skill enhancement

There is a severe shortage of staff skilled in various aspects of development communication. Communication training needs tend to be at two levels: technical skills development through short courses and conceptual and analytical skill development through degree courses. CPDD should overcome these skills shortage by providing appropriate skill training to its current staff and appointing the suitably qualified and skilled new staff (see annex I for proposed staff position, duties and qualification). However, there should be a mechanism to up-date staff's skills through a regular in-service training to keep pace with the advancing information and communication technologies. Some basic communication training needs for CPDD and proposed RCPDU staff are listed here:

1. Science writing and editing course for NARC's CPDD and Regional Communication, Publication and Documentation Unit (RCPDU) staff.
2. Librarian training for CPDD and RCPDU staff.
3. PowerPoint (software) running and computer-based video projection for CPDD staff.
4. Desk-top publishing and graphic design for CPDD's publication section staff.
5. Web page designing and publishing for CPDD's publication and library section staff

6. Development communication and media production techniques for CPDD, and RCPDU management-level staff.
7. Video camera operation and basic techniques on video production for RCPDU staff.
8. M. Sc. In development communication, development journalism, public relation

The detail of training plan of action to be developed with NARC' Training and Scholarship Unit.

Agricultural research information flow in NARC

The information services scenario of agricultural Research Systems in NARC should be seen in three aspects:

1. Information Production
2. Information Processing and value addition
3. Information dissemination

The main roles and responsibilities of CPDD lie in stage 2 and 3.

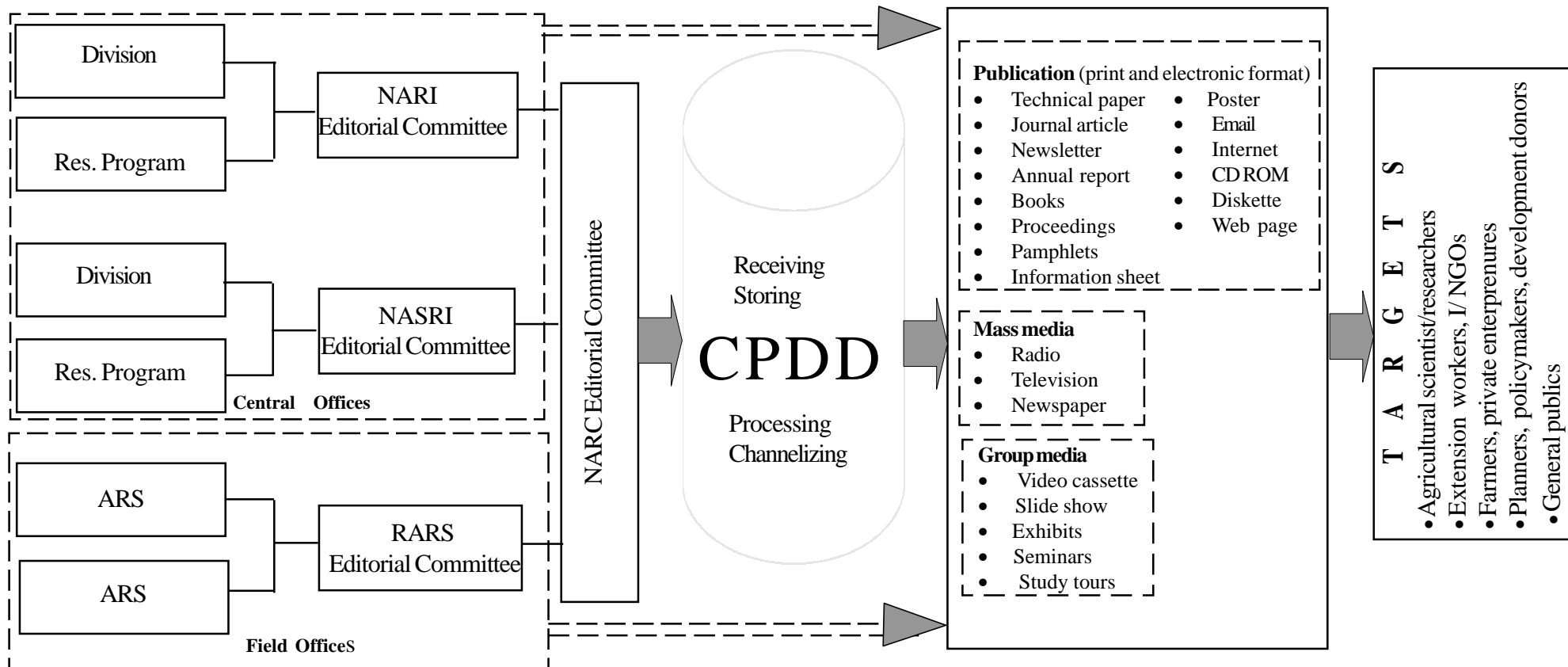
Information production: This is the stage where all the research disciplines under, NARC at the center (Kathmandu) and outlying stations (RARS/ ARS) should generate adequate information and research data. These information can be produced in the form of periodic progress reports, technical papers, annual reports, seminar and conference proceedings research highlights etc. both in paper and electronic formats. Production of adequate information if their research projects should be a mandatory responsibility of all the NARC researchers. All centers should devise mechanism so that scientists and researchers would take production of research information as one of their responsibilities.

Information processing or repackaging: A system will have to be developed so that CPDD receives research information timely and regularly. For this, proposed Regional Communication, Publication and Documentation Division should be made functionally active. They have to coordinate information production functions at the RARS level and feed in the information to CPDD at the Center Level. Then CPDD has to review the quality and consistency of the information and do value addition and repackaging targeting to specific audiences. Here lies the important role of professional editors who would edit and produce user friendly communication materials. Therefore, CPDD should have professional editors having proven skills in scientific editing (in both English and Nepali), desktop publishing and computer operation. Preferably they should be familiar with agricultural science.

Similarly, in order to maintain technical quality and consistency of the research information it would be quite useful to form technical publication editorial committees at research institutes, RARS and NARC levels with representatives from major disciplines of agricultural sciences. The roles and responsibilities of these editorial committees will be to:

- Coordinate, facilitate, and develop the technical and scientific publications of their respective research organizations
- Set standards and procedures for technical and scientific publications of NARC systems
- Review and approve individual technical and scientific publications with respect to the relevant standards and procedures
- Monitor and assess the NARC's and respective stations' technical information and publications to ensure the technical quality standards and needs of NARC different clients
- Formulate and implement policies related to scientific information production, processing and dissemination through different media

Information Dissemination: Having processed and value added CPDD then has to disseminate those information to internal, external and international clients through various communication channels. The possible channels or media CPDD could use for dissemination of agriculture research information are: Publications (both print and electronic), email, Internet, newspaper, radio, TV, exhibition, seminar, workshop, mobile video and slide show etc. depending on the specific target users of the information.



Information Production

Information Processing

Information Dissemination

NARC Information flow

Communication strategies for agricultural research

NARC's main mandate is to generate agricultural technologies on crops, livestock and other related field by conducting high level studies and research. It is equally important for NARC to disseminate the results of its research and useful information to various clients, the local, regional, national and international institutions, researchers, extension workers, farmers, I/NGOs and private entrepreneurs. If the results of NARC's research programs are inadequately communicated to potential users, they can not be widely utilized to produce desired economic impact. NARC's Communication, Publication and Documentation Division (CPDD) should play a coordinating role for the processing and dissemination of research information produced by NARC system. However, CPDD's present staff strength and their skill seems inadequate to handle the increasing volume of work and provide quality information services. Therefore, CPDD would need to be strengthened in term of staff, equipment and professional skills. An immediate priority should be given to hire an editor and filling the vacant post of librarian and provide skill enhancement training to staff. This should be the starting point to move forward to the CPDD's long term strategy.

CPDD's Communication strategy

CPDD's strategies for communicating NARC's research results fall into four major functional categories, depending on the information to be disseminated and audiences to be reached:

1. Technical and scientific communication
2. Program communication
3. Public communication
4. Promotional communication

Technical and scientific communication

Majority of CPDD's communication activities falls into this category. NARC's research results are to be communicated to its internal and external clients through different types of technical publication both in print and electronic format. These publications would contain major findings of NARC research programs. Editorial committees proposed to be formed at different levels (Regional Stations, Research Institutes and NARC) should ensure the quality, validity and consistency of these publication. Having technically reviewed and approved by the editorial committees, either ultimately it has to go to CPDD for processing and value addition which then be channelised through appropriate media, or concern organization will channelize the information by themselves after necessary processing and value addition. These media could be different from of publications such as annual reports, journal articles, books etc. The main target audiences for this category of NARC's communication strategy are agricultural scientists, researchers, extensionist and university students.

General programs communication

This category of CPDD's communication strategy would be targeted to three main receiving group: Intra-program communication, formal reporting to responsible line organization and communicating to donor agencies. Publication of annual work program, annual reports, periodic progress reports, newsletter possibly both in print and electronic format would be necessary in this category.

Public communication

CPDD should also produce and deliver communication services for multiple receiver group such as planners, policy makers and general publics in order to making the NARC's research program and its achievement more visible to wider audience. In this category communication material such as program brochures, radio and TV program, video and slide show to community, press releases, exhibits, field days and farm fairs etc. could be the useful methods to be used. These communication activities will help to deliver the NARC's research results to wider audiences especially to farmers, extension workers and general publics.

Promotional communication

Promotional communication activities would be useful to keep regular linkage and maintain council's good image with the related organizations within and outside the system. It could also be necessary to attract donors for grants and credits support for the development of research capabilities. As promotional communication channels, CPDD can use both conventional methods e.g. publication and distribution of fliers, diaries, calendar, liaison visit to relevant institutions in the country and abroad by NARC/ CPDD appropriate staff, as well as using electronic media e.g. internet, email, web-site publishing, radio, TV etc.

Communication strategy matrix for NARC's CPDD

Target audience	Objective (Change needed)	Strategy	
		Messages	Methods
<p>Agriculture scientists, Extensionists, academician University students</p> <p><i>(Technical and Scientific Communication)</i></p>	<ul style="list-style-type: none"> ▪ To enable NARC's scientists to select prioritize and design need based agricultural research projects by enhancing access on scientific information ▪ To encourage NARC scientists to share scientific and technical information for their mutual benefit ▪ To transfer NARC generated technologies to extensionists who then translate and extend to farmers for wider adoption ▪ To provide agricultural research information access to academician and students carrying research work on agricultural topics. 	<ul style="list-style-type: none"> ▪ Prepare and access research proposals ▪ Designing research methodology ▪ Interpretation and evaluation of research results ▪ Diagnosis and treatment of crop diseases ▪ Diagnosis and treatment of livestock diseases ▪ New technological development in crops and livestock ▪ Insect/ pest diagnosis and treatment in crops and livestock ▪ NARC's recommended technologies on crops and livestock ▪ Preparing conference papers and presentation ▪ Current issues in agricultural research eg. bio-diversity conservation, environmental impact etc. ▪ Designing field trial 	<ul style="list-style-type: none"> ▪ Technical papers and reports ▪ Scientific journal ▪ Discussion paper ▪ Workshop conference proceedings ▪ Email, internet ▪ Providing effective library services eg journal abstracts, CD-ROM, AGRIS and CARIS online information search, current content service etc. ▪ Publication of books, research highlights, booklets and pamphlets on package of practices of recommended technologies ▪ Exchange visit
<p>Research planners, policy makers line organization, donor, INGO</p> <p><i>(General program communication)</i></p>	<ul style="list-style-type: none"> ▪ To make planners policy makers and line agencies informed of the NARC programs, activities and achievements ▪ To get support of policy makers and planners for NARC's research program ▪ To keep INGO and donor agencies informed of the NARC's research programs and activities 	<ul style="list-style-type: none"> ▪ Agricultural research needs ▪ Impact of NARC's technologies on production and productivity ▪ NARC research findings and their impact on national economy ▪ NARC research programs, activities and achievements ▪ Successful cases resulted by the adoption of NARC technologies etc. 	<ul style="list-style-type: none"> ▪ Annual Reports ▪ Program brochures ▪ Newsletter ▪ Periodic progress reports ▪ Summary of research results (yearly basis) ▪ Bibliographies ▪ Mass media eg. radio, TV, News papers etc. ▪ Seminar, conference, talks program etc on research program and achievements.
<p>Farmers, development workers (JT, JTA) private entrepreneur, local NGO etc.</p>	<ul style="list-style-type: none"> ▪ To communicate NARC's research programs and generated technologies 	<ul style="list-style-type: none"> ▪ Major findings (impact points) of NARC research ▪ NARC recommended technologies on crops and 	<ul style="list-style-type: none"> ▪ Technical magazine in national language (for extension use) ▪ Booklets,

Target audience	Objective (Change needed)	Strategy	
		Messages	Methods
<p>(public communication)</p> <p>All related institutions and individuals (in country and abroad) whom NARC has to keep linkage and maintain good relation</p> <p>(Promotional communication)</p>	<p>to general publics and help technology transfer for wider adoption.</p> <ul style="list-style-type: none"> ▪ To keep NARC linkage and good relation with other related organizations in country and abroad ▪ To maintain council's good image with related national and global level organizations ▪ To impress donor agencies for grant and credit supports for strengthening council's research capabilities 	<p>livestock</p> <ul style="list-style-type: none"> ▪ Technical know how for practicing recommended technologies on crops and livestock ▪ Safe use of agro-chemical and pesticide ▪ Availability of source seeds and animal breeds. ▪ Environment friendly farming practices etc. ▪ NARC major program and activities ▪ NARC outstanding achievements ▪ NARC good image 	<p>pamphlets, posters etc.</p> <ul style="list-style-type: none"> ▪ Radio, TV ▪ Slides, video tapes ▪ Newspapers ▪ Farm fair, exhibition ▪ Organizing farmers and extension workers visit to research centers and stations ▪ Briefing, flip-chart ▪ Briefing slides ▪ Video tape on NARC program ▪ Dairies, calendar ▪ Liaison visit to relevant organization ▪ Website publishing

Annex I: Proposed CPDD staff's duties, skills and qualifications

Position	Level	Duties	Skill and qualification
Admin. And management Unit			
Division Chief		Plans, coordinates and manages division's overall activities	M. Sc. or Ph. D. in Development communication, Agri. Extension or development studies
Accountant		Maintain account for the division. Plan financial aspect of division's media production activities	B. Com. B.A. in accounting. Familiarity with media production
Administrative Assistant		Maintain division personnel records. Perform secretarial duties.	Diploma Typing, computer operation and secretarial skills
Store Keeper		Maintain inventory of printing, photographic, video and other office supplies	Certificate level or Higher Secondary
Driver		Drive and maintain division vehicle	Driving Motor mechanics
Messenger		Clean and maintain work environment. Deliver messages. Other duties as required	Primary school
Publication Section			
Publication Officer		Plan, coordinate and manage the design and production of publications. Liaise with NARC's other institutions, divisions and stations to design and publish annual reports, Newsletters, proceedings etc	M. Sc. in or with journalism or development communication Expertise in agriculture. Understanding of research, extension and farmer needs. Skills in writing. Editing, designing publications. Computer literate (word processing and desktop publishing) Fluency in English and Nepali.
Senior Editor (Science)		Conceptualizes, designs, writes, edits, proofreads and maintain the standard of NARC scientific and technical publication (English language) as per set style guide. Coordinate publication production process.	Minimum B. Sc. in or with journalism or communication (preferably M. Sc.) Expertise in agriculture. Understanding of research, extension and farmer needs. Skills in writing, editing, designing publications. Skills in computer (word processing and desktop publishing) Fluency in English and Nepali
Editor (General and Nepali)		Conceptualizes, designs, writes, edits, proofreads and maintain the standard of NARC general and popular publications (English and Nepali language). Coordinates production process for these publication	M.A. in English, B. Sc. in or with journalism or communication Expertise in agriculture. Understanding of research, extension and farmer needs. Skills in writing, editing, designing publications. Skills in computer (word processing and desktop publishing) Fluency in English and Nepali
Desktop and web site Publishing Specialist		Designs publication. Lays out edited manuscripts on screen. Design graphics and incorporate in	Minimum B. Sc. Preferably in journalism, development communication or computer

Position	Level	Duties	Skill and qualification
		manuscripts and produce camera ready copy for printing. Design and publish web site.	science. Skills in computers, publication design and Web site publishing. Fluency in Nepali and English
Computer Operator		Keyboards manuscripts. Incorporates editorial changes into text. Produces camera ready output.	Higher Secondary education Skills in typing. computer operation (word processing). Nepali and English
Publication Assistant (Distribution)		Manages distribution of publications. Maintain computerized databases of mailing addresses. Liaises with other government organizations and NGOs to enhance distribution. Seeks innovative ways of distributing material cost-effectively.	Higher Secondary education Skills in typing. computer operation (word processing). Nepali and English
Artist		Draws illustrations for inclusion in publications. Develops cartoons, signboards, exhibits and displays as required	Minimum of high school (SLC) education Skills in drawing (realistic and cartoon) Familiarity with agriculture and rural life in Nepal
Still Photographer		Takes and process photographs of different events and research activities. Maintains photo, slide and phot-negative library	High school education Skill in photography and photographic processing
Public Relation Section			
Public Relation Officer (PRO)		Develops press releases for print and electronic media. Organizes and coordinates seminars, conferences talks. Performs master of ceremony in seminars and conferences. Manages programmes and briefing for visitors. Handles public relation NARC systems.	Minimum B. Sc. in or with public relations or journalism Expertise in agriculture. Understanding of extension and farmer needs. Skill in print and electronic media production. Fluency in English and Nepali.
Public Relation Assistant		Assists in organizing seminars, conference, talks etc. Accompanies visitors to farm walk. Gathers relevant information for press releases.	I. A. public relations or journalism Expertise in agriculture. Understanding of extension and farmer needs. Skill in print and electronic media production. Fluency in English and Nepali
Audio- Visual Section			
Communication Officer (Audio- visual)		Takes overall in-charge of Audiovisual Section. Plans, coordinates and manages unit's overall activities such as video productions, slide kit development, still photography etc.	Minimum B. Sc. in or with mass communication (preferably M. Sc.) or equivalent experience Expertise in agriculture Knowledge of video equipment capabilities and functioning
Video Editor		Edits video footsges to produce programmes. manages studio and operates console during live recording,. Sets video and audio levels and ensures production quality	B. Sc. in or with electronics and communications engineering video editing Ability to provide creative inputs and guide director on possible treatment
Production Assistant (Video)		Assists producer/ director during production. Keeps logging of raw visuals. Labels and identifies footages,	I.Sc. in or with communication or equivalent experience Diligent and patient

Position	Level	Duties	Skill and qualification
Video Camera man		maintains library of footages, previews and selects tape. Operates camera and lights in studio and on location. Edits footages when needed. Maintains camera and accessories.	Minimum high school education Expertise in photo composition, camera operation Skill in selecting appropriate angles and shots
Library Section			
Librarian		Plans, coordinates and manages library services effectively. Updates library with key books, journals, abstracts, CD-ROM and other relevant database etc.	M. Sc. in library science. Computer literate (Word processing, internet, online search)
Assistant Librarian (AGRIS, CARIS,CDS/ISI S)		Manages AGRIS, CARIS, CDS/ISIS databases and online search. Orients and facilitates NARC scientists to use these databases and online information search	B. Sc.or preferably M.Sc. in library science or Information Technology. Computer literate (Word processing, internet, online search, CD-ROM)
Assistant Librarian (Computerizing catalogue, Bibliography)		Computerizes library catalogues. Develops bibliography of NARC publications in print and electronic formats	B. Sc. in library science or Information Technology. Computer literate (Word processing, internet, online search, CD-ROM)
Messenger		Clean and maintain books selves and library environment. Deliver messages. Other duties as required	Primary school education

Annex II: Proposed RCPDU staff's duties, skills and qualifications

Position	No. of Staff	Duties	Skill and Qualification
Communication officer (T6 or S1)	1	Lead RCPDU. Plan, coordinate, and manage RARS's communication publication and documentation activities. Compile, edit and produce periodic and annual reports, publish region specific research findings for extension use. Organize seminars, workshops, field days, handle visitors etc.	M.Sc. in Agri. Extension or Development Communication. Understanding of farmers needs and adoptive research etc.
Assistant Communication Officer (Audio-visual) T5	1	Coordinate and organize seminars, workshop, and training. Operate and maintain audiovisual equipment. Coordinate with RCU and ACD to produce radio video and print media for extension use. Organize field days, exhibitions, etc. Take care of visitors to the station. Assist in overall communication activities of the station.	I.Sc. Ag. Trained in development communication, skill in AV aids and their operation.
Assistant Librarian (T5)	1	Update and manage station library. Facilitate acquisition of relevant journals to station's scientists. Coordinate with NARC's central library for information acquisition and provide photocopies of content pages of new acquisitions.	I.A. or equivalent. Trained in library science and development communication, skill in email and internet use.
Publication Assistant	1	Manages distribution of publications. Maintain computerized databases of mailing addresses. Liaisons with other government organizations and NGOs to enhance distribution	Higher Secondary education Skills in typing, computer operation (word processing). Nepali and English