# **Training Course on "Communication Skills in Agriculture"**

# **Course Manual**

# **Program Dates**

Batch 01: 06 - 08 February 2018 Batch 02: 11 - 13 February 2018 Batch 03: 18 - 20 February 2018



National Agricultural Technology Program- Phase II Project (NATP-2) Project Management Unit (PMU) Ministry of Agriculture BARC Complex, Farmgate, Dhaka1215

# Training Course on "Communication Skills in Agriculture"

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February 2018

# **Table of Contents**

Section	Content	Page
	Training Program	4
	Introduction	7
	Objectives of the Training Course	8
	Course Related Administrative Information	9
Session - 1	NATP and Communication Needs of NATP	10
Session - 2	Communication & Elements of Communication	17
Session - 3	Strengths Weaknesses Opportunities & Threats (SWOT) Analysis	24
Session - 4	Use of SWOT Analysis in Project Management & Operations	26
Session - 5	Developing Communication Strategy	27
Session - 6	Preparation, pre-testing and finalization of messages for Interpersonal, Print, Radio and TV	31
Session - 7	Testing Appropriateness of Messages	38
Session - 8	Innovative ICT Tools and Applications (Mobile, Tab, Apps, Laptop, Computer, Video etc.) in Agriculture Sector	40
Session - 9	Benefits of ICT Interventions in Agricultural Sectors	57
Session - 10	Written Communication: Scientific/Technical Report Writing	60
Session - 11	Tips for Writing Success Stories	71

# Program of the Training Course on "Communication Skills in Agriculture"

Time	Торіс	Trainer's Activity	Participant's Activity	Aids	Resource Person
0830- 0930	Reg	istration	Al	1 participants	1
0930-		Trease			
1030- 1030		Inaug	gural Session		
1030-		Т	ea break		
1100		1	cu bi cuix		
1100-	Pre-Training				Manzur
1200	Evaluation of				Hasan
	Participants				Bhuiya,
					DPD, PMU,
					NATP-2
1200-	NATP and	Trainer will explain	Participants will	Multimedia	Shah
1300	Communication	NATP-2 & its	Listen, take notes	projector	Muhammad
	Needs of NATP	communication	& discuss		Nasim ndc,
		needs.			PD, NATP-2
1300-		Lunc	ch & Prayer		
1400					
1400-	Communication	Trainer will explain	Participants will	Multimedia	M Harun-ur-
1500	& Elements of	communication &	listen, take notes,	projector,	Rashid,
	Communication	elements of	ask question &	flip chart	T&CS,
		communication.	answer questions.		PMU,
					NATP-2
1500-	Strengths	Explains the	Participants will	Multimedia	Md.
1600	Weaknesses	procedure of doing	listen, observe,	projector,	Mamunur
	Opportunities &	the SWOT analysis	take notes,	flip chart,	Rahman,
	Threats (SWOT)	and how to identify	discuss and	stand,	CEO,
	Analysis-I	strengths,	practice SWOT	marker pen	EXPOPRO
		weaknesses,	analysis.		
		opportunities,			
		threats.			
1600-	Use of SWOT	Explains use of	Participants will	Multimedia	Shah
1700	Analysis in	SWOT Analysis in	listen, observe,	projector	Muhammad
	Project	Project Management	take notes,		Nasim ndc,
	Management &	& Operations	discuss and		PD, NATP-2
	Operations		practice		

# Day 2: Methods of Communication

Time	Торіс	Trainer's Activity	Participant's Activity	Aids	Resource Person
0930- 1030	Developing communication strategy	Trainer will explain communication strategy	Participants will listen & take notes	Multimedia, flip chart	Shahjahan Bhuiya
1030- 1100		т	'ea break		
1100- 1200	Developing communication strategy	Trainer will explain communication strategy.	Participants will listen & take notes	Multimedia, flip chart	Shahjahan Bhuiya
1200- 1300	Preparation, pre- testing and finalization of messages for interpersonal, print, radio, TV.	Trainer demonstrates methods of preparing and testing appropriateness of the message till they respond or learn.	Participants will listen, observe, take notes, discuss and practice.	Multimedia projector, flip chart, stand, marker pen	Md. Mamunur Rahman, CEO, EXPOPRO
1300- 1400			ch & Prayer	I	L
1400- 1500	Preparation, pre- testing and finalization of the messages for interpersonal, print, radio, TV.	Trainer demonstrates methods of preparing and testing appropriateness of the message till they respond or learn.	Participants will listen, observe, take notes, discuss and practice.	Multimedia projector, flip chart, stand, marker pen	Md. Mamunur Rahman, CEO, EXPOPRO
1500- 1600	Testing appropriateness of messages	Trainer demonstrates means of testing appropriateness of messages to the different categories of audience until they respond or learn.	Participants will observe, take notes, discuss and practice.	Multimedia projector, flip chart, stand, marker pen	Md. Mamunur Rahman, CEO, EXPOPRO
1600- 1700	"Planning of Event"-what, for whom, how, when and what happened?	Trainer demonstrates preparation of Communication strategy action plan.	Participants will listen, observe, take note and practice.	Multimedia projector, flip chart	Md. Mamunur Rahman, CEO, EXPOPRO

# Day 3: Innovative ICT based Extension Method

Time	Торіс	Trainer's activity	Participant's Activity	Aids	Resource Person
0930- 1030	Application of Mobile, Tab, Mobile Apps, Laptop, Video	Trainer will explain how Mobile, Tab, Mobile Apps, Laptop, Video	Participants will listen, observe, take note and practice.	Multimedia projector	Shahid Uddin Akbar, CEO, Bangladesh Institute of ICT
	Clips, Filler etc. for Agriculture Development	Clips, Filler etc. can use for Agriculture Development	Provenue i		in Development (BIID)
1030- 1100		Т	ea break		
1100- 1200	Benefits of ICT intervention for Agriculture Development	Trainer will explain how the farmers will get all above benefits through ICT intervention	Participants will listen, observe, take note and practice.	Multimedia projector	Shahid Uddin Akbar, CEO, BIID
1200- 1300	Written Communication: Scientific/Technical Report Writing	Trainer will explain forms of communication, written communication and how to write reports	Participants will listen, observe, and take note and practice.	Multimedia projector	M Harun-ur- Rashid, T&CS, PMU, NATP-2
1300- 1400		Lunch	and Prayer		
1400- 1500	Tips for Writing Success Story	Trainer will explain what a good success story is and its writing tips.	Participants will listen, observe, take note and practice.	Multimedia projector	M Harun-ur- Rashid, T&CS, PMU, NATP-2
1500- 1600	Post-Training Evaluation of Participants				M Harun-ur- Rashid, T&CS, PMU, NATP-2
1600- 1700		Certificate A	ward and Closing	3	

# Training Course on "Communication Skills in Agriculture"

### **1.0 Introduction**

For each type of development such as social, economic, religious, political and educational, communication has its important place; similarly for the all round development of agriculture the communication process also deserves its significant role. Agriculture is an ancient occupation. If the agriculture may be recognized only as a factory of producing the food grains there is no difference between the ancient time and modern time agriculture. According to the economics, for other productions there are needed factors as land, labor, money and management which are still in the present and were in the past also. Now, what is the modern agriculture? The modern agriculture is that in which the person adopts the latest new methods of agriculture based on science and modern technology for the agricultural production.

For the modern agriculture, there is need of one more factor and this factor is the latest scientific and technological knowledge. Thus, in the modern agriculture for the agricultural production along with the four factors one more factor of the latest knowledge (fifth) has been added. Now, the question arises from where this new knowledge may be achieved? The first need is that to create the new knowledge and the second need is to send this latest knowledge to the farmers/users.

If the middle part or the Agriculture Extension and information tool may be replaced the latest knowledge cannot reach the farmers and its result will be obstacle in the progress of farming. Thus, we see that for the modernization of farming the communication process has its special contribution.

ICT brings about social and economic development by creating an enabling environment. Almost every single activity in the modern world is becoming more dependent on the application of ICT for one use or another. The benefits of ICT reach even those who do not themselves have first-hand access to them. ICT-based agricultural extension brings incredible opportunities and has the potential of enabling the empowerment of farming communities. With the availability of ICTs, the scheme for an increasing number of extension staff may no longer be exclusively valid. Moreover, the use of ICT to improve information flow and to connect people within the rural areas has proved that illiteracy of farming communities may no longer be an excuse to deny some form of extension system. The social systems and networks in Bangladesh also aid in the sharing of knowledge.

Yet, while use of ICT in extension provides for several key benefits in relation to traditional media, ICT projects also come with a range of challenges including: technological dependence; lack of accessible telecommunication infrastructure in many rural and remote

areas; capital cost of technologies, high cost of on-going access and support; inherent need for capacity building; often difficulty in integrating with existing media, and local communication methods and traditions and often lack of involvement of all stakeholders in planning, especially women and youth.

As a part of implementing the NATP-2 project, a training course on "Communication Skills in Agriculture" has been planned in three batches to enhance the knowledge and skills of the officers and scientists of the NATP-2 components and other implementers.

#### The objectives, importance, scope etc of the training course are given below in details.

# 2.0 Objectives of the Training Course

#### At the end of the training course the participants will be able to:

- 1) Understand the NATP-2 Outlines & Communication Needs for NATP-2 for the participants
- 2) Explain communication, target audience, sender, message, channel, follow-up and feedback
- 3) Analyze strengths, weaknesses, opportunities and threats of Bangladesh Agric. Sector
- 4) Categorize target group, assessment and analyze audience's needs and problems and knowledge, attitude and practice about the selected interventions
- 5) Collect information from reliable sources and prepare messages appropriate to audiences and conduct test until target people response or learn
- 6) Select and use channel appropriate to the target people for transmitting the technologies.
- 7) Explain and practice follow-up and feedback
- 8) Assess the desired changes happened and prepare the follow- up program for the failure
- 9) Create more satisfying relationships
- 10) Expand your options for meeting and handling personal challenges
- 11) Lower your stress levels
- 12) Improve your productivity when a task involves other people
- 13) Increase your personal and professional opportunities

# **Course Related Administrative Information**

#### **Course Date and Duration**

This is the three-day training course and will be organized in three batches as follows:

Batch 01: 06 - 08 February 2018 Batch 02: 11 - 13 February 2018 Batch 02: 18 - 20 February 2018 **Venue** 

The course will be organized in the *Training Hall of BARC Training Building*, 2<sup>nd</sup> floor of Bangladesh Agricultural Research Council, Farmgate, Dhaka-1215.

#### **Medium of Instruction**

The medium of instruction will be English and **Bangla** mixed. However, use of **English** will be emphasized.

#### **Evaluation**

The learning achievements of the participants and their active participation in the course will be assessed through their pre and post training evaluation.

#### **Dress Code**

Dress code is casual; but formal dress is preferred.

#### **Accommodation**

We apologize that PMU does not have any accommodation facilities to conduct a residential training course. However, BARC has limited dormitory facilities in the same (training) building. Participants are requested either to approach BARC Training Office or arrange their own accommodation.

#### **Training Allowance**

Training allowance includes lunch, morning and afternoon tea and modest pocket money to all participants. Logistic support like folder, writing pad, ball pen, training materials etc. will be provided.

#### **Attendance**

Full attendance of participants is essential. Attendance of participants will be checked regularly. So participants are requested to be punctual and maintain course discipline.

## Awarding Certificate

In the concluding ceremony, certificate will be awarded to the successful participants.

# **Course Materials**

# Session-1: NATP and Communication Needs of NATP

Shah Muhammad Nasim ndc Project Director, NATP-2

#### At the end of the session the participants will be able to:

- Describe objectives of NATP/NATP-2; its component, implementing units/agencies, aims, etc.
- > Describe needs and importance of communications in agriculture/NATP;
- > Describe scope and skills of communications in agriculture.

# **1.1 Project Development Objective (PDO)**

**NATP:** NATP is a 3 phased 15 year long program designed to support the strategy of the Government of Bangladesh (GOB) to improve national agricultural productivity, market linkage and farm income, with a particular focus on small, marginal and female farmers.

**NATP Phase-I (NATP-1):** NATP-1 was implemented during 2007-2014 in 120 upazilas of 25 districts. The World Bank, IFAD and GOB financed the project. World Bank rated the project as one of the most successful flagship projects. NATP-1 had 7 Components (PIUs of BARC, KGF, DAE, DLS, DOF & Hortex and PCU).

**NATP Phase-II** (**NATP-2**): NATP-2 is designed based on the success and learning from NATP-1. The Project Development Objective (PDO) of National Agricultural Technology Program-Phase II Project (NATP-2) is *to increase agricultural productivity of smallholder farms and improve smallholder farmers' access to markets in selected districts.* Implementing period: 2015-16 to 2020-21. The World Bank, IFAD, USAID and GOB are financing the project. NATP-2 has 5 Components (PIUs of BARC, DAE, DOF & DLS and PMU).

The project development objective (PDO) of NATP-2 will be achieved through: a) strengthening the capacity of research, extension services and farmers to generate, diffuse and adopt agricultural technologies aimed at increasing farm productivity and reducing post-harvest losses; and b) promoting the sustainability of existing and newly created farmer groups and producer organizations by facilitating their stronger participation in commodity value chain, market-linkages, and improving their knowledge and skill base. Thus, the PDO will be achieved through the generation and release of more productive and locally adaptable technologies, enhancing availability of quality seeds/ breeds/ fingerings/ breeding materials at

the small farm level and providing relevant production, value addition, food safety and marketing support

# **1.2 NATP-2** Components with Implementing Units and Agencies

NATP-2 will be implemented through five interrelated inter-ministerial components. The components with implementing agencies are:

- **i. Component-1: Enhancing Agricultural Technology Generation**-To be implemented by the Project Implementing Unit of Bangladesh Agricultural Research Council (PIU-BARC), MOA
- **ii. Component-2: Supporting Crop Development**-To be implemented by the Project Implementing Unit of Department of Agricultural Extension (PIU-DAE), MOA
- **iii. Component-3: Supporting Fisheries Development**-To be implemented by the Project Implementing Unit of Department of Fisheries (PIU-DOF), MOFL;
- **iv. Component-4: Supporting Livestock Development**-To be implemented by the Project Implementing Unit of Department of Livestock Services (PIU-DLS), MOFL;
- v. Component-5: Project Management-To be implemented by the Project Management Unit (PMU), MOA

# **1.3 NATP-2 Project Locations**

NATP-2 will support research, extension and value chain programs/activities at field level. Location of the project will be as follows:

- i) **Research Program:** Research program will have nationwide coverage.
- ii) Extension Program: Extension program/activities will be carried out in 270 upazilas of 57 districts; include 107 upazilas selected from NATP-1, plus 163 new upazilas selected under NATP-2 (Table-1). Detailed list with location map is enclosed in Annex 1.2.

Division	District	Upazila
1	2	3
8 Divisions	57 Districts	270 upazilas (107 upazilas selected from NATP- 1, plus 163 new upazilas selected under NATP-2)

**Table-1: Project locations for extension programs/activities** 

**Value Chain Program:** Value chain activities will be conducted/ piloted in 30 clusters in selected 30 upazilas for crops; 20 POs in 20 upazilas and two special POs one each in Mymensingh and Natore districts will be established and supported with logistics and training for fisheries; and 120 potential CIGs for livestock.

# 1.4 Aims of NATP-2

#### The Project aims at:

- Developing location specific, demand-led and problem solving agro-technologies through Competitive Research Grants (CRG) and Program Based Research Grants (PBRG).
- Providing demand-driven, participatory and decentralized extension services to crops, livestock and fisheries sectors through establishing Farmer Information Advice Center (FIAC) at union level at union level;
- Formation of Common interest Groups (CIGs), Producer Organizations (POs) and Farmers Information and Advice Centers (FIACs) at Union level, their social mobilization and preparation of micro-plan and micro extension plan through bottom up planning
- Introducing improved post harvest management practices for high value agriculture and promoting farmer-market linkages of selected commodities.
- Building capacity of the implementing agencies and their individual scientists/officers through need-based higher studies and knowledge & skills improvement trainings and visits.
- Improving the knowledge base and skills of CIG farmers and the leadership capability of CIG/Community leaders.
- Strengthening research-extension-farmer linkages and public-private partnership (PPP) in research, extension and supply chain development.
- Introducing Agricultural Innovation Fund (AIF) as grants or matching grants to help demand-led technology generation, strengthening CIG operation and improving agrotrading.

# **1.5 Specific Objectives of NATP-2**

NATP-2 has many output targets (details in DPP and PIM). In order to achieve those, the project will implement several specific objectives. The major specific objectives are:

#### i) Research Related Specific Objectives

- 1) 100 Competitive Research Grants (CRG) proposals will be undertaken;
- 2) 33 Program Based Research Grants (PBRG) proposals will be undertaken;
- 3) 40 new/improved technologies will be demonstrated/validated in the project areas;
- 4) Targeted Human Resource Development (HRD) programs (80 local PhDs, 60 foreign PhDs, short-term training, study visit, etc) will be implemented;
- 5) Research and training facilities in NARIs, particularly at outreach stations (RARS/ ARS) will be improved;
- 6) ICT facilities will be developed and connectivity will be established among ARS, RARS and NARI-HQs;
- 7) Necessary workshop /seminar /consultation meeting, etc. will be organized.

#### ii) Extension Related Specific Objectives

- 1) 40,710 CIGs (crops-27150, fisheries-5,430 and livestock-8,130) will be organized, mobilized and supported on a continuous basis in 270 project upazilas of 57 districts;
- 60% of CIG farmers, i.e. 640,000 CIG farmers (including 35% female farmers) will adopt at least 1 improved technology promoted by the project;
- Yield productivity of selected agricultural commodities will be increased by 08-100% (rice 14%, wheat 10%, tomato 20%, eggplant 25%, banana 15%, lentil 16%, mustard 12%, maize 12%, potato 8%, onion 10%, garlic 10%, mungbean 16%; dairy 30%, beef 40%, culture fishery 60%, and capture fishery100%) (Details in Annex 1.1);
- 4) Approximately 2,838,291 households (crops-1,898,610, fisheries-373,818 and livestock-565,863) will be benefitted from the project interventions;
- 5) 40 innovative on-farm agricultural/agro-processing technologies will be demonstrated in project areas for adoption by the farmers;
- 6) 93% clients (farmers, traders, etc.) will be satisfied with the extension services provided in the project areas;
- 7) 3000 technology adoption sub-projects/proposals with AIF-2 grants and 500 marketing sub-projects/proposals with AIF-3 grants will be implemented;
- 8) 4.3 million client-days training will be provided to scientists, extension providers, farmers, traders, processors, etc over the project period for capacity building;
- 20 horticulture centers, 1 central pesticide laboratory, 8 seed testing laboratories of SCA and 546 training facilities (district-16, upazila-80, FIAC-450) of DAE will be improved in the project areas;
- 10) For DOF, 07 training rooms and 03 computer labs will be developed; 110 dormitory rooms will be renovated and furnished training centers; 02 fish landing centers will be established and supported with equipment and logistics; 2 Fish feed and ingredient testing laboratory and NRCP will be supported with equipment, reagents, chemicals; and 40 beels will be brought under appropriate fisheries management by establishing fish sanctuaries, beel nurseries, stocking fish fry/fingerlings and introducing fishing code under DOF;
- 11) Laboratory equipment and materials for Central Disease Investigation Laboratory (CDIL), Field Disease Investigation Laboratory (FDIL), Central Nutritional Laboratory, Artificial Insemination (AI) Laboratory, Public Health Laboratory, and Upazila Veterinary Hospitals of DLS will be provided;
- 12) Necessary workshop /seminar /consultation meeting, etc. will be organized;
- 13) ICT facilities will be developed/ improved and connectivity will be established among the stakeholders.

#### iii) Supply Chain Related Specific Objectives

 Value chains program will be established in 30 clusters in 30 upazilas for crops; 20 POs in 20 upazilas; and 02 special POs one each in Mymensingh and Natore districts will be established and supported with logistic and training for fisheries and 120 potential CIGs for livestock;

- 2) By the end of the project 8,400 metric tons of agricultural commodities will be sold semi-annually through project arranged marketing facilities;
- 3) Food safety laboratories will be modernized, awareness will be developed, quality ensured and service will be provided;
- 4) Necessary workshop /seminar /consultation meeting, etc. will be organized.

#### iv) Project Management Related Specific Objectives

- 1) Project activities/interventions of PIUs will be initiated, progressed and achievements will be made as per plan and targets;
- 2) PIUs program target in research, extension and market access will be achieved;
- 3) Fund will be provided to PIUs and PDOs will be achieved;
- 4) Research-extension-farmers-market linkages will be facilitated;
- 5) JPSC and other coordination meetings, monitoring, evaluation, impact assessment, audit, etc, will be arranged and communicated to PIUs;
- 6) Capacity building in-country trainings on cross-cutting issues, and foreign trainings and study visits abroad will be organized;
- 7) Awareness building workshops, seminars, regional/national review workshops, etc will be organized.

#### v) ICT Initiatives

NATP-2 will promote an integrated approach to leverage ICT to ensure linkages between the various components and stakeholders, technology transfer, information sharing and market access. ICT within the project will be harmonized to align with ongoing national ICT initiative under Digital Bangladesh. This entails that the project will utilize common standards, delivery platforms, connectivity, Data Center facilities, and use of the GOB cloud - to leverage synergies and reduce duplication. The building of an Agriculture Knowledge Repository (AKR) and a Knowledge Platform to disseminate this knowledge will be important ICT initiatives under the NATP-2 project.

#### **1.6 Introduction of Agricultural Innovation Fund (AIF)**

Agricultural Innovation Fund (AIF) has been introduced as grants or matching grants to help researchers, CIG farmers and agri-traders. Three types of Agricultural Innovation Fund (AIF), viz. AIF-1, AIF-2 and AIF-3 are in operation.

**AIF-1** would be used to cover the research sub-projects and related cost. Selected research proposals will receive 100% AIF-1 grants. Each CRG research proposal will get up to BDT 57.58 lakh (USD 74,300) and each PBRG will get up to BDT 387.50 lakh (USD 500,000) depending on the size and nature of the proposal.

**AIF-2** grants will be provided as matching grants to well-performing CIGs to help increase their productive assets, potential incomes and sustainability of the groups. Each recipient group will get up to 70% of total subproject cost, ceiling to BDT 3.875 lakh (USD 5000).

**AIF-3** grants will be provided as matching grants to rural entrepreneurs having trade license and private sector companies whose sub-projects benefit smallholder farmers in the project areas, either by providing a market opportunity for farmers/ producers by providing services relevant to the smallholder farmers. In some cases, registered CIGs and POs could be eligible for AIF-3 grants. Each recipient will get 50% of the total subproject cost from AIF-3 grants, ceiling to BDT 5.82 lakh (USD 7500). Details of AIF grants operational procedures are provided in AIF Manual.

Principles set for AIF-2 &AIF-3 grants will be applicable for components 2 (crop), component 3 (fisheries) and component 4 (livestock).

#### **1.7 Importance of Communications in Agriculture**

For each type of development such as social, economic, religious, political and educational, communication has its important place; similarly for the all round development of agriculture the communication process also deserves its significant role. Agriculture is an ancient occupation. If the agriculture may be recognized only as a factory of producing the food grains there is no difference between the ancient time and modern time agriculture. According to the economics, for other productions there are needed factors as land, labor, money and management which are still in the present and were in the past also. Now, what is the modern agriculture? The modern agriculture is that in which the person adopts the latest new methods of agriculture based on science for the agricultural production.

For the modern agriculture, there is need of one more factor and this factor is the latest knowledge. Thus, in the modern agriculture for the agricultural production along with the four factors one more factor of the latest knowledge (fifth) has been added. Now, the question arises from where this new knowledge may be achieved? The first need is that to create the new knowledge and the second need is to send this latest knowledge to the farmers/users.

If the middle part or the Agriculture Extension and information tool may be replaced the latest knowledge cannot reach the farmers and its result will be obstacle in the progress of farming. Thus, we see that for the modernization of farming the communication process has its special contribution.

#### **1.8 Scope of Agricultural Communications**

There are few suggestions to strengthen agricultural communication, which are as below:

- 1) In various fields, for the information related to the agricultural and rural development there should be regulations for giving more space in the newspapers.
- 2) Booklets and leaflets should be published in which there should be description of solution to the problems and the working methods.
- 3) In the booklets, there should be details of agricultural equipment i.e., pump-sets, electrometers, tractor, engine, etc. things as well as the methods of their repairing.
- 4) Television set and a radio set should be provided to the village centre.
- 5) The program of rural/agricultural development should get much time on radio and television centre.
- 6) The small telefilm of the development should be made, which should be shown at each film theatre.
- 7) The film-producer should be urged that they should involve the plot of rural development in his dramas.
- 8) In the rural area, the exhibitions of rural and agricultural development should be organized in the fairs and festivals.
- 9) At each district, centre the Farmers Exhibition should be organized regularly once in a year etc.

#### **1.9 Communication Skills in Agriculture**

Communication skills are critical to all aspects of business development. Whether you are considering a new venture or are well down the road and revising your business plan, the ability to exchange and gather information, perhaps in high-stakes crucial conversations, and to express the attributes of your value-added product or service honestly and without bias, can make or break your business. By their very nature, many farming operations and farmer-led value-added business projects tend toward sole-proprietorships, partnerships and similar models where one person independently makes most of the decisions. Many farmers don't see the need to communicate and may consider situations that require it unnecessary and avoidable. This mindset is eventually toxic to any operation, particularly value-added business ventures that require group decision-making, managing complex operations and diverse group dynamics. Across the modern agricultural landscape, to be able to handle changing situations, new technologies and get the greatest advantage from key human relationships, verbal and written communication skills in agriculture are priceless skill sets.

# Session-2: Communication & Elements of Communication

M Harun-ur-Rashid

Training & Communication Specialist, PMU, NATP-2

#### At the end of the session the participants will be able to:

- > Define communication and communication process
- Describe barriers to communication
- > Describe the importance of listening and few traits of listeners
- Explain feedback, nonverbal communication and Mehrabian Myth
- Explain elements of communication
- > Explain steps in developing communication

## **2.1 Communication**

Communication is the exchange and flow of information, message and ideas from one person to another by speaking, writing, gesture/posture (body language) or using some other medium. It is the means of sending or receiving information/news/ideas, etc. Television, telephone and computer/internet are effective means of communication. Communication is what we try to do speak to those near us.

#### In general, communication is a means of connecting people or places:

- i) *Connecting people:* means of sending or receiving information/news/ideas telephone/computer/satellite communication.
- ii) *Connecting places:* means of travelling or transporting goods road/railway/air communication.

Communication involves a sender transmitting an idea, information, or feeling to a receiver (U.S. Army, 1983). *Effective* communication occurs only if the receiver understands the exact information or idea that the sender intended to transmit. Many of the problems that occur in an organization are either the direct result of people failing to communicate and/or processes, which leads to confusion and can cause good plans to fail (Mistry, Jaggers, Lodge, Alton, Mericle, Frush, Meliones, 2008). Studying the communication process is important because you coach, coordinate, counsel, evaluate, and supervise throughout this process. It is the chain of understanding that integrates the members of an organization from top to bottom, bottom to top, and side to side.

## **2.2 Development Communication**

**Development communication** refers to the use of communication to facilitate social development. Development communication engages stakeholders and policy makers, establishes conductive environments, assesses risks and opportunities and promotes information exchanges to bring about positive social change via sustainable development. Development communication techniques include information dissemination and education, behavior change, social marketing, social mobilization, media advocacy, communication for social change and community participation.

A recent and more encompassing definition of development communication states that it is: ...the art and science of human communication linked to a society's planned transformation from a state of poverty to one dynamic socio-economic growth that makes for greater equality and the larger unfolding of individual potentials.

*Erskine Childers* defined it as the "Development support communications is a discipline in development planning and implementation in which more adequate account is taken of human behavioral factors in the design of development projects and their objectives". *According to the World Bank*, development communication is the "integration of strategic communication in development projects" based on a clear understanding of indigenous realities. *In addition, the UNICEF* views it as a "two-way process for sharing ideas and knowledge using a range of communication tools and approaches that empower individuals and communication as a "planned and systematic application of communication resources, channels, approaches and strategies to support the goals of socio–economic, political and cultural development"

#### **2.3 Communication Process**

#### Communication that is what we try to do speak to those near us

- Thought: First, information exists in the mind of the sender. This can be a concept, idea, information, or feelings.
- **Encoding:** Next, a message is sent to a receiver in words or other symbols.
- Decoding: Lastly, the receiver translates the words or symbols into a concept or information that he or she can understand.

During the transmitting of the message, two elements will be received: content and context. **Content** are the actual words or symbols of the message that is known as *language* — the spoken and written words combined into phrases that make grammatical and semantic sense. We all use and interpret the meanings of words differently, so even simple messages can be misunderstood. And many words have different meanings to confuse the issue even more.

**Context** is the way the message is delivered and is known as paralanguage — it is the nonverbal elements in speech such as the tone of voice, the look in the sender's eyes, body language, hand gestures, and state of emotions (anger, fear, uncertainty, confidence, etc.) that

can be detected. Although paralanguage or context often cause messages to be misunderstood as we believe what we see more than what we hear; they are powerful communicators that help us to understand each other. Indeed, we often trust the accuracy of nonverbal behaviors more than verbal behaviors.

Some leaders think they have communicated once they told someone to do something, "I don't know why it did not get done. I told Jim to do it." More than likely, Jim misunderstood the message. A message has not been communicated unless it is understood by the receiver (decoded). How do you know it has been properly received? By two-way communication or feedback it can be known. This feedback tells the sender that the receiver understood the message, its level of importance, and what must be done with it. Communication is an exchange, not just a give, as all parties must participate to complete the information exchange.

## 2.4 Barriers to Communication

Nothing is so simple that it cannot be misunderstood. — Freeman Teague, Jr.

Anything that prevents understanding of the message is a barrier to communication. Many physical and psychological barriers exist:

- Culture, background, and bias We allow our past experiences to change the meaning of the message. Our culture, background, and bias can be good as they allow us to use our past experiences to understand something new, it is when they change the meaning of the message that they interfere with the communication process.
- Noise Equipment or environmental noise impedes clear communication. The sender and the receiver must both be able to concentrate on the messages being sent to each other.
- **Ourselves** Focusing on ourselves, rather than the other person can lead to confusion and conflict. The "Me Generation" is out when it comes to effective communication. Some of the factors that cause this are defensiveness (we feel someone is attacking us), superiority (we feel we know more that the other), and ego (we feel we are the center of the activity).
- **Perception** If we feel the person is talking too fast, not fluently, does not articulate clearly, etc., we may dismiss the person. Also our preconceived attitudes affect our ability to listen. We listen uncritically to persons of high status and dismiss those of low status.
- Message Distractions happen when we focus on the facts rather than the idea. Our educational institutions reinforce this with tests and questions. Semantic distractions occur when a word is used differently than you prefer. For example, the word chairman instead of chairperson may cause you to focus on the word and not the message.
- **Environmental** Bright lights, an attractive person, unusual sights, or any other stimulus provides a potential distraction.

- **Smothering** We take it for granted that the impulse to send useful information is automatic. Not true! Too often we believe that certain information has no value to others or they are already aware of the facts.
- **Stress** People do not see things the same way when under stress. What we see and believe at a given moment is influenced by our psychological frames of references our beliefs, values, knowledge, experiences, and goals.

These barriers can be thought of as filters, that is, the message leaves the sender, goes through the above filters, and is then heard by the receiver. These filters may muffle the message. And the way to overcome filters is through active listening and feedback.

# **2.5 Active Listening**

Hearing and listening is not the same thing. Hearing is the act of perceiving sound. It is involuntary and simply refers to the reception of aural stimuli. Listening is a selective activity which involves the reception and the interpretation of aural stimuli. It involves decoding the sound into meaning.

Listening is divided into two main categories: passive and active. Passive listening is little more that hearing. It occurs when the receiver of the message has little motivation to listen carefully, such as when listening to music, storytelling, television, or when being polite.

People speak at 100 to 175 words per minute (WPM), but they can listen intelligently at 600 to 800 WPM. Since only a part of our mind is paying attention, it is easy to go into *mind drift* — thinking about other things while listening to someone. The cure for this is *active listening* — which involves listening with a purpose. It may be to gain information, obtain directions, understand others, solve problems, share interest, see how another person feels, show support, etc. It requires that the listener attends to the words and the feelings of the sender for understanding. *It takes the same amount or more energy than speaking.* It requires the receiver to hear the various messages, understand the meaning, and then verify the meaning by offering feedback. The following are a few traits of active listeners:

- Spend more time listening than talking.
- Do not finish the sentences of others.
- Do not answer questions with questions.
- Are aware of biases. We all have them. We need to control them.
- Never daydreams or become preoccupied with their own thoughts when others talk.
- Let the other speakers talk. Do not dominate the conversations.
- Plan responses after the others have finished speaking, NOT while they are speaking.
- Provide feedback, but do not interrupt incessantly.
- Analyze by looking at all the relevant factors and asking open-ended questions. Walk others through by summarizing.
- Keep conversations on what others say, NOT on what interests them.
- Take brief notes. This forces them to concentrate on what is being said.

# 2.6 Feedback

When you know something, say what you know. When you don't know something, say that you don't know. That is knowledge. — Kung Fu Tzu (Confucius).

The purpose of feedback is to alter messages so the intention of the original communicator is understood by the second communicator. It includes verbal and nonverbal responses to another person's message.

Providing feedback is accomplished by paraphrasing the words of the sender. Restate the sender's feelings or ideas in your own words, rather than repeating their words. Your words should be saying, "This is what I understand your feelings to be, am I correct?" It not only includes verbal responses, but also nonverbal ones. Nodding your head or squeezing their hand to show agreement, dipping your eyebrows shows you don't quite understand the meaning of their last phrase, or sucking air in deeply and blowing it hard shows that you are also exasperated with the situation.

**Carl Rogers** listed five main categories of feedback. They are listed in the order in which they occur most frequently in daily conversations. Notice that we make judgments more often than we try to understand:

- **Evaluative:** Making a judgment about the worth, goodness, or appropriateness of the other person's statement.
- **Interpretive:** Paraphrasing attempting to explain what the other person's statement means.
- **Supportive:** Attempting to assist or bolster the other communicator.
- **Probing:** Attempting to gain additional information, continue the discussion, or clarify a point.
- **Understanding:** Attempting to discover completely what the other communicator means by her statements.

Imagine how much better daily communications would be if listeners tried to understand first, before they tried to evaluate what someone is saying.

## 2.7 Nonverbal Behaviors of Communication

To deliver the full impact of a message, use nonverbal behaviors to raise the channel of interpersonal communication:

- **Eye contact:** This helps to regulate the flow of communication. It signals interest in others and increases the speaker's credibility. People who make eye contact open the flow of communication and convey interest, concern, warmth, and credibility.
- **Facial Expressions:** Smiling is a powerful cue that transmits happiness, friendliness, warmth, and liking. So, if you smile frequently you will be perceived as more likable, friendly, warm and approachable. Smiling is often contagious and people will react favorably. They will be more comfortable around you and will want to listen more.
- **Gestures:** If you fail to gesture while speaking you may be perceived as boring and stiff. A lively speaking style captures the listener's attention, makes the conversation more interesting, and facilitates understanding.

- **Posture and body orientation:** You communicate numerous messages by the way you talk and move. Standing erect and leaning forward communicates to listeners that you are approachable, receptive and friendly. Interpersonal closeness results when you and the listener face each other. Speaking with your back turned or looking at the floor or ceiling should be avoided as it communicates disinterest.
- **Proximity:** Cultural norms dictate a comfortable distance for interaction with others. You should look for signals of discomfort caused by invading the other person's space. Some of these are: rocking, leg swinging, tapping, and gaze aversion.
- Vocal: Speaking can signal nonverbal communication when you include such vocal elements as: tone, pitch, rhythm, timbre, loudness, and inflection. For maximum teaching effectiveness, learn to vary these six elements of your voice. One of the major criticisms of many speakers is that they speak in a monotone voice. Listeners perceive this type of speaker as boring and dull.

# **2.8 Speaking Hints**

#### Speak comfortable words! — William Shakespeare

- When speaking or trying to explain something, ask the listeners if they are following you.
- Ensure the receiver has a chance to comment or ask questions.
- Try to put yourself in the other person's shoes consider the feelings of the receiver.
- Be clear about what you say.
- Look at the receiver.
- Make sure your words match your tone and body language (nonverbal behaviors).
- Vary your tone and pace.
- Do not be vague, but on the other hand, do not complicate what you are saying with too much detail.
- Do not ignore signs of confusion.

## 2.9 Elements of Communication

*There are seven elements of communication, these are:* Source idea, Message, Encoding, Channel, Receiver, Decoding, and Feedback.

#### Let's discuss each element.

The **Source idea** is the process by which one formulates an idea to communicate to another party. This process can be influenced by external stimuli such as books or radio, or it can come about internally by thinking about a particular subject. The source idea is the basis for the communication.

The Message is what will be communicated to another party. It is based on the source idea, but the message is crafted to meet the needs of the audience. For example, if the message is between two friends, the message will take a different form than if communicating with a superior.

**Encoding** is how the message is transmitted to another party. The message is converted into a suitable form for transmission. The medium of transmission will determine the form of the communication. For example, the message will take a different form if the communication will be spoken or written.

The **Channel** is the medium of the communication. The channel must be able to transmit the message from one party to another without changing the content of the message. The channel can be a piece of paper, a communications medium such as radio, or it can be an email. The channel is the path of the communication from sender to receiver. An email can use the Internet as a channel.

The **Receiver** is the party receiving the communication. The party uses the channel to get the communication from the transmitter. A receiver can be a television set, a computer, or a piece of paper depending on the channel used for the communication.

**Decoding** is the process where the message is interpreted for its content. It also means the receiver thinks about the message's content and internalizes the message. This step of the process is where the receiver compares the message to prior experiences or external stimuli.

**Feedback** is the final step in the communications process. This step conveys to the transmitter that the message is understood by the receiver. The receiver formats an appropriate reply to the first communication based on the channel and sends it to the transmitter of the original message.

# Session- 3: Strengths Weaknesses Opportunities & Threats (SWOT) Analysis

## Md. Mamunur Rahman Communications Specialist and CEO, EXPOPRO

# What is SWOT Analysis?

SWOT analysis (or SWOT matrix) is an acronym for Strengths, Weaknesses, Opportunities & Threats. You can use the SWOT analysis to <u>identify and analyze</u> the <u>Strengths</u> and <u>Weaknesses</u> of your organization, as well as the <u>Opportunities</u> and <u>Threats</u> discovered by the information we have gathered on the external environment.

## Who uses it?

• The <u>team members, the managers.</u>

## Why use it?

• To develop a plan that takes into consideration many different internal and external factors, and <u>maximizes</u> the potential of the strengths and opportunities while <u>minimizing</u> the impact of the weaknesses and threats.

## When to use it?

While <u>developing a strategic plan</u> or <u>planning a solution to a problem</u>, after we have analyzed the external environment (for example, the culture, economy, agricultural development, sources of funding, demographics, etc.).

# How to use it?

- Internal Analysis: Examine the capabilities of our organization. This can be done by analyzing our organization's strengths and weaknesses.
- External Analysis: Look at the main points in the environmental analysis, and identify those points that create **opportunities** for our organization, and those that create **threats** or obstacles to performance.
- Enter the information we have collected in <u>steps one and two</u> into a table as illustrated below:
- We can use this information to help us develop a strategy that <u>uses the strengths and</u> <u>opportunities to reduce the weaknesses and threats</u>, and to achieve the objectives of our organization.

	POSITIVE	NEGATIVE
INTERNAL	Strengths	Weaknesses
EXTERNAL	Opportunities	Threats

# Using a SWOT Analysis

T	Strengths	Weaknesses
INTERNAL	<ul> <li>willingness of staff to change</li> <li>good location of office</li> <li>perception of quality of services</li> </ul>	<ul> <li>staff lack of motivation</li> <li>small building</li> <li>paper work and bureaucracy</li> <li>cultural differences with users</li> </ul>
	Opportunities	Threats
EXTERNAL	opportunities	Tineats

# **Internal Analysis**

## Management Capabilities: for example

- Organizational structure
- Planning
- Coordination
- Staffing
- Supervision
- Training
- Management Information System

# Programming Capabilities: for example

- Capacity
- Quality

# Financing Capabilities: for example

- Self-financing
- Outside funding sources

# Session- 4: Use of SWOT Analysis in Project Management & Operations

Shah Muhammad Nasim ndc Project Director, NATP-2

# 4.1 Strength

- > Highly qualified, competent and experienced Agri-scientists & personnel
- ➢ Favorable climate
- Agricultural Research and development
- Available technologies for major crops
- Agricultural network
- ➢ Farmers are innovative and adaptive
- Sufficient workforce
- Available irrigation

## 4.2 Weakness

- Weak Marketing System
- Loss during harvest
- Lack of agricultural credit access
- ➢ Water, fertilizer use efficiency is low
- Low private sector investment
- Weak quality control mechanism
- Lack of academic involvements
- ➢ Use of ICT
- Absence of farmers training

## **4.3 Opportunities**

- Collaboration opportunities among line ministries, departments and other system actors (eg. NATP-2 Project)
- > Technological know-how is available for dissemination
- Proper utilization of hilly areas
- Export potential is high
- Scope for crop diversification
- Market for value added product exists

## 4.4 Threats

- Environmental vulnerability
- Declining soil quality
- Declining amount of cultivable land
- Uncertainty in fair prices
- Declining budgetary allocation
- Land transformation

# **Session-5: Developing Communication Strategy**

## Shajahan Bhuiya

#### At the end of the session the participants will be able to:

- Define communication strategy
- Describe the process and outline of communication strategy
- Explain target audience and also identify NATP target audience
- Explain procedure of developing message and identify information needs
- Identify communication channel and their combination for transmitting massages most effectively and efficiently.

## 5.1 Definition of Communication Strategy

An ideal communication strategy details the structure of information flow, the message, the correct audience to address, potential vehicles to carry the message, resources required to complete, and feedback mechanisms to learn from the whole exercise. A communication strategy is a systematic, well- planned series of actions, combining different methods, techniques and tools to achieve an intended change or objective utilizing the available resources within a specific time frame. Communication strategy is the "what, why, when, how and where" of conveying a message. In other words strategy is science and art of combining and employing means and methods of communication in planning and directing activities of a project.

In the past, communication did not receive so much of critical attention as it does now-adays, more particularly in the field of development and development administration. It was perceived as a spare-wheel in administrative actions, development and so on. It has now emerged as steer-wheel of development and all meaningful activities. So, the importance of communications should not be seen lightly by the development professionals, managers, administrators, academics and so on.

In any type of communications, its strategy should be viewed as very important to determine the successes or failures of the communications used to achieve the stated objectives/goals of any organization and its projects and programs. So, at the outset, it is necessary for you to understand the two very important concepts- communication and strategy.

In brief, you can understand the concept of communication as "the exchange of information that is mutually understood" and the concept of strategy as "the best fit or congruence" between the success factors arising out of strategic opportunities and the distinctive competencies of an organization. So, communications strategy is the "communication best fit" to yield maximum desirable results out of any planned communication.

A communications strategy is designed to help you and your organization communicate effectively and meet core organizational objectives.

# **5.2 How to Develop a Communication Strategy**

The following are the steps in developing a communications strategy-

- (1) Statement of purpose;
- (2) Current situation;
- (3) Stating organizational objectives and communication objectives clearly;
- (4) Identifying the stakeholders;
- (5) Deciding and developing messages;
- (6) Selecting and using key communication media and methods;
- (7) Developing the work plan; and
- (8) Evaluating success.

# 5.3 Statement of Purpose

In developing a communications strategy, the first thing to do is to start with stating clearly the purpose of the strategy. It means you state why you have developed a communications strategy and what you hope to achieve with it. This does not need to be a very detailed statement. It is to act as a reference and reminder for those using it in their work. For example:

"This communications strategy shows how effective communications can:

- help us achieve our overall organizational objectives
- engage effectively with stakeholders
- demonstrate the success of our work
- ensure people understand what we do
- change behavior and perceptions where necessary"

**Your Current Situation:** The introductory part of the communications strategy should briefly say what your organization does, what its main functions are and where it operates. It should also look at your organization's communications strengths - what has been successful and what has not worked well over last few years. The following tools can be used to help analyze your organization's current situation.

#### a) PEST Analysis

This involves listing the Political, Economic, Social and Technological factors that could affect your organization's work. These could be positive or negative factors and should include issues that might have an impact on how your organization operates. You should indicate why each factor will have an effect.

#### b) SWOT Analysis

A SWOT Analysis involves listing your organization's strengths, weaknesses, opportunities and threats. Think about what it means in terms of communications priorities. How can threats be turned into opportunities? How can you play on your strengths through effective communication?

### c) Competitor Analysis

This is another useful tool in assessing your current situation. This tool helps you to look into what your competitors are doing. You identify your main competitors and rank them against certain criteria. You should try to be objective when assessing current strengths and weaknesses.

# **5.4 Organizational Objectives and Communication Objectives**

Any communications strategy should closely reflect your overall organizational plan. In this section, you should look at your organization's vision, goals and objectives. You should then suggest how communications can help achieve the goals and objectives.

By referring to specific objectives, this section should give an overall sense of the principles of communications that underpin the strategy and key messages that the organization wants to convey.

It should be kept in your mind that your communication objectives are seen as contributing factors towards achievement of the overall objectives of the organization.

# 5.5 Identifying the Stakeholders

This section should include a detailed description of your main stakeholders of communication. They can be both internal as well as external to your organization. They can be your organizational staff or outsiders like public, politicians, beneficiaries and so on with whom you need to get connected. One part of the strategy might look at which receivers will be interested in which parts of your organization or activities. Understanding this may ease your prioritization of communications work.

Another way of prioritizing your stakeholders might be to 'map' them. This involves choosing criteria which are important to your organization and then ranking your different stakeholders against those criteria enabling you to do your communication work as per your prioritization.

# **5.6 Messages**

Once you have identified your stakeholders, the next task is to break down the objectives into relevant messages for each of those stakeholders. Start with the stakeholder who receives the highest priority followed by others in the list of priority.

Remember that your messages should be relevant and appropriate to the stakeholders. It is very important that there is continuity across the messages. It is also important that all of your stakeholders understand what kind of organization you are, so your messages needs always to link back to your key organizational objectives and values.

For developing message, first comes your stakeholders, then the needs for each group of the stakeholders and finally key communication messages developed matching the needs of each group.

# 5.7 Key communication Media and Methods

Now you have to decide about the media for each group of the stakeholders. Broad categories of media are print, electronic and interpersonal communications (IPC). After you have decided about the broad media, you match the appropriate channel that will work effectively. These might include leaflets, posters, e-bulletin, press- release, workshops, conferences, website, TV, radio, home-visitor/ extension-worker and so on.

There are pros and cons to all of these channels, which once again will vary depending on the needs and resources of your organization. Try a simple internal analysis of the channels you have at your disposal. This analysis will help you to find out the best channel to use for getting specific messages to particular stakeholders.

# 5.8 Work Plan

With your stakeholders and matching channels identified, the next step is to draw up a table that shows the key communications activities, budget and resources allocated to delivering the strategy. These will help you measure clear steps towards ultimate goals.

There may be specific projects, events or publications that you know will take place and these should be highlighted.

# **5.9 Evaluating Success**

Your communications strategy should conclude with a section on evaluation. What does success look like and how will you know when objectives have been met.

Here you should indicate the tools you will use to evaluate various sections of your communications. These could be simple measures such as the number of responses to e-bulletins, hits to your website, etc. These can be used in the policy and plan changes when there is such a need.

# Session- 6: Preparation, pre-testing and finalization of messages for Interpersonal, Print, Radio and TV

Md. Mamunur Rahman Communications Specialist and CEO, EXPOPRO

# Message:

- > A message is an **object of communication**
- > It is a **vessel which provides information**
- > Its meaning <u>dependent on the context</u> in which it is used
- > Term may apply to both the **information and its form**
- > A message is **<u>information</u>** which is sent from a source to a receiver
- Thing which hit/touch/effect human and human mind...It could be...Harmful or Beneficial/Local or Global/Costly or Free
- Short or Long/Happy or Sorrow/Hard or Soft

# Why it is (Message)?

- To Inform
- To motivate
- To share & care
- To help
- To benefit
- To change
- To uplift
- To Increase
- To Develop Effective Communication

# **Message Identification**

<u>**Criteria</u>**: Logical, Sequential, Beneficial, Profitable, Useful, Important, Indicative, Qualitative, Quantitative...</u>

## It could be identifies by

Survey, Research, Workshop, Seminar, Conference, Interview, Discussion, Feedback, Reference...

## **Preparation Process**

- Getting Information/Collecting Information/Sharing Information / Exchange Information/Survey Information/Stock Information/Media campaign Information and also
- > TNA, Survey, Interviews, Meeting...

...Collect-Accumulate-Grade-Prepare ...

# **Message Planning**

- What is the **<u>exact message</u>** to be communicated?
- Who exactly are the **<u>intended target people</u>**?
- <u>How much they know</u> already?
- Is this giving them <u>all the information they need</u>?
- Is this giving them <u>more information</u> then they really need?
- Is this giving them more information <u>than they can absorb</u> easily at a time?
- Is this publication <u>actively trying to interest</u> its anticipated?
- Is the information in a form the **<u>intended will understand</u>**?
- How can they **answers to all these questions** be tested?

## Message Processing or Cooking

To give emphasis on **KISS** (Keep It Simple & Short). That is <u>easy accessible</u> and <u>understandable</u>. Specially <u>beneficial</u> for the target people...

Analyze- Organize- Re-organize- Prioritize- Select-Use

# **Tools for Message Dissemination**

Print- Poster, Leaflet, booklet, sticker, Bookmark...
Audio Media- Radio (SW, MW, FM...)
Community Radio...
Audio-Video-TV (Satellite & Terrestrial)
Web Radio, Web TV
Multimedia-Documentary, Song, Cartoon, Pod, Gomvira etc
Mobile Phone (Call, SMS, AM, IVR...)
E-Book/Community/Social media...

# **Message Dissemination**

- Using <u>all possible media</u>
- Through <u>Extension Communication Method</u> (Farm & Home visit, Field visit, Training, Meeting, Demonstration, etc)
- □ Through <u>Agricultural Journalism</u>
- □ Through <u>Development Communication</u> (Print & Electronic media
- **Modern Media**, Mobile phone, multimedia, documentary, etc

# Basic formula or key word for dissemination of INFOLOGY...

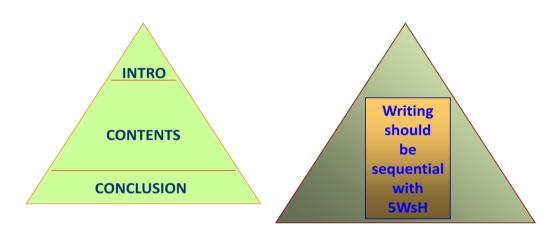
**5 WsH**: Who, What, Why, When, Which, How

- 6 C's-Correct/Complete/Clear/Concrete/Comprehensive/Concise
- 6 S's Short, Simple, Sober, Successfulness, Straight, Strong

ABCD-Attractive-Brief-Clear-Definable CAMPUS: Colorful/Attractive/Meaningful/Perfectness/Usable /Sustainable AIDA- Attention, Interest, Desire and Action

## **AIMS for Effective Media communication**

AIMS-1 Audible -Intelligent –Meaningful- Sympathetic AIMS-2 Attract-Inform-Motivate-Satisfy AIMS-3 Attention-Involvement-Mobilization-Sustainable



# Format of Scripting for Media

## **01. Introduction**

- Attractive/Dramatic
- Very Specific & Concrete
- Easy
- Logical
- Legal
- Well Planned
- Short... Summary lead/ Delay Lead/Quotation Lead/Question Lead/ Bullet Lead/ Short Sentence lead/Drama Lead/ Pictorial Lead/Contrast Lead

## 02. Content or Subject

- Different Para
- Technical information (Chronologically)
- Logical jump over
- Easy depth about subject matter

- Less data
- Short & Simple word/Sentence
- Proved & Update Example... Info of single ides with speedy manner, data, explanation, example, reference, history, appreciation, benefit, interest ...

# 03. Conclusion

- Sum up of write-up
- Short
- Attractive
- Impressed
- Clear
- Repetition of special information
- Cordial sign-out/Winding up... Winding up/sum up of the facts with attractive and appealing style

# **Technique Follow**

- Write as **your own speech**
- <u>Short words</u>
- <u>Short sentences</u>
- Everyday <u>vocabulary</u>
- Few <u>figures</u>/less <u>data</u>
- Meaningful <u>images</u>
- Example for <u>everyday experience</u>
- Mention people and place known to audience
- <u>Un-wanted</u> Bangla ???
- <u>Complex/Scientific/technical</u> Sentence
- Un familiars/popular <u>words</u>

# **Principle of Message**

- □ Specific Issue
- □ Single issue
- □ Simplest form
- Demand driven
- **Genuine** information with trust
- □ Affordable
- □ Available
- □ Ongoing & vital issue

# Message must do...

- Catch the eye or mind
- Hold the attention

- Eger to know
- Stimulate interest
- Gain confidence
- Convince the reader/audience/viewer
- Go for execution
- Sustainability for development

## **RADIO**

- One of the **<u>cheapest media</u>** to contact **<u>large no of farmers quickly</u>**
- <u>Versatile tool to disseminate messages</u> in creating awareness & interest
- Most **important medium to save life & assets during disaster**, nothing has the potential to reach so many rural people as radio
- Provides <u>timely warning</u> about pest & diseases, weather forecasting & market prices

# **Scripting for Radio**

- Idea for a Talk
- Research the Subject
- Make a Plan
- Write first Draft
- Check First Draft
- Re-Write
- Check & Trial go for Final
- Rehearsal (RE-HEAR-SALE)
- Testing
- Production & Dissemination

# **Further Hints**

- Opening & starting
- Language & presentation style
- Facts & figure & Data
- Repetition for special part
- Quotation & wise word in rhythmic way
- Summary & Winding up

A Good Radio Talk : Advances the listener's knowledge, holds the interest and stimulates the listener to find out more for their development.

# **Electronic Media includes**

Research..Planning..Scripting..Shooting..

Editing..Effects..Insert..Graphics..Production team..Direction...Production...

A Television script contains all the necessary <u>audio and video information</u> for a complete show. The script generally shows the video instruction on <u>one half of the page, the audio instruction on the other</u>.

# **<u>Right type of program to communicate</u>**

- <u>Target audience</u>; Class/category/label/other
- <u>Time slot;</u> Morning, Noon, Evening, Night...Season, period
- <u>Style:</u> Infotainment, Edutainment
- Make words work/Define terms, words- the reader may not know /Use examples/Explain statistics/Use Illustrations/ Bring people into the report
- Use quotations...Show the benefits Appeal to the reader's curiosity
- Large in impact, size or significance, nearby or familiar, Recent, Unusual

# **Presentation**

# Get into the content

- Do you believe that?
- Do you think the focus is right?
- Do you find any need for editing?
- Do you like the language? Is it right for the target audience?
- Does the script talk?

# Analyze the script

- Define the mode of the message
- Select the pause
- Find the punch words
- Define the field and speed of the lines
- Add a bit of acting/body language

# Have to notice

- → Issue- How much noticeable
- ➔ Message-As per desired
- ➔ Script- Short, simple,
- → Style-Words, Sentence, Para,
- → Theme-Burning or ongoing issues
- → Making-Scripting, Shooting, Editing, Finalization
- → Presentation-Read, talk, Play, Pause Pitch Punch
- → Learning-As a target viewers
- ➔ Good sides- Remarkable
- ➔ Weak sides- Editable
- → Suggestions- for future development

# **Use of Color**

- Red-stimulates emotion
- Green-inspires interaction
- Yellow-for cheerfulness
- Purple-implies mystical quality
- Blue-shows calm and conservation
- Black-for power and sophistication

# **Touch Down**

- Connect with the <u>lead story</u>
- Point out the gain in adopting solution
- Appeal for <u>action</u>...let us <u>unite</u>
- Use a **quotation**
- Have a **punch packed last sentence**

# Mind that most people are

- Lazy Readers
- Poor Listeners but
- Willing lookers So
- Try to use appropriate media for development (Depend on Place, Time, Person)... Tell me: I will forget; Show me: I will remember; Involve me: I will understand...

# **Session- 7: Testing Appropriateness of Messages**

Md. Mamunur Rahman Communications Specialist and CEO, EXPOPRO

# What is the cumulative experience in this room?



## So by now...we know...

- WHY we want to communicate
- WHAT we want to communicate
- WHO we want to communicate

#### **But...**

- What is the GOAL of my communication?
- What is the PRIMARY MESSAGE that I want my audience to keep <u>recalling</u>, <u>referring back to</u> and <u>shouting out to others</u> even after the formal communication process is over?

# Some questions to ask ourselves

Do I UNDERSTAND what I am asked to communicate?

Primary Message? Standard format – a MYTH?

# Desired CONSEQUENCE?

# **PRIORITIZE** audience

# How to determine appropriateness of messages?

## **Understand the audience**

- What do you know about your target audience?
- Who are they?
- What are their backgrounds?
- What does their day consist of?
- What are their needs?
- How much detail would they want?
- How is it easiest to communicate with them?
- What do they care about most?

# Select communication channel

- Must fit the participants and the communication task
- Wisely combining different media can increase the impact of communication messages
- Select channels that....reflect the patterns of use of the specific participant group... reach the group with the greatest degree of frequency, effectiveness and credibility...accessible and appropriate

## **Reference Material: Table on Channel Characteristics**

- Media/ channels (e.g. poster, flyer, video, folk theatre) + Interpersonal communication
- Mass media (e.g. television, radio) + Interpersonal communication
- Mass media promote positive social norms. Represent gender equity, rights, and ethnic groups
- Folk theatre used in areas where other channels cannot reach
- Broadcast media broaden the reach of print materials to illiterate audiences

# A channel is effective when...

- People can remember the information
- People get motivated to tell other people about this information
- People change their behavior based on the information
- Channel provides timely information
- Channel creates a climate for change
- Channel efficiently reaches targeted groups of people and is cost-effective

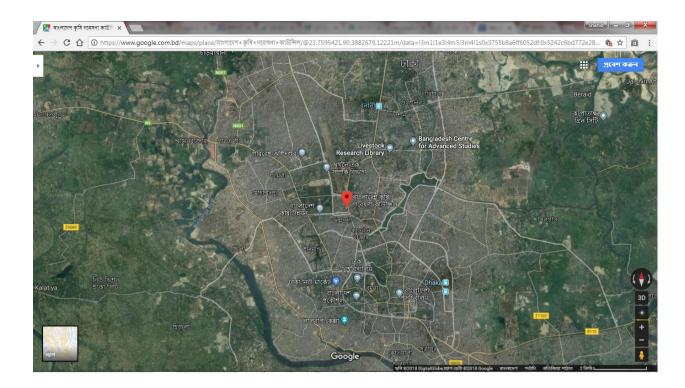
# **<u>Group Task:</u>** Developing communication strategy

- 1. What is the product?
- 2. Whom to communicate? How did you select them? Where do they live? Background information? What are their needs?
- 3. Why to communicate? Reason for communication
- 4. What is the message that you want to leave behind?
- 5. When to communicate?
- 6. How to communicate? Medium? Why choose this medium?
- 7. Desired result.

# Session- 8: Innovative ICT Tools and Applications (Mobile, Tab, Apps, Laptop, Computer, Video etc.) in Agriculture Sector

Md. Shahid Uddin Akbar CEO, Bangladesh Institute of ICT in Development (BIID)





#### **Objective of the Session**

Mapping the existing ICT applications and solutions available in agricultural domain to make the sector(s) efficient

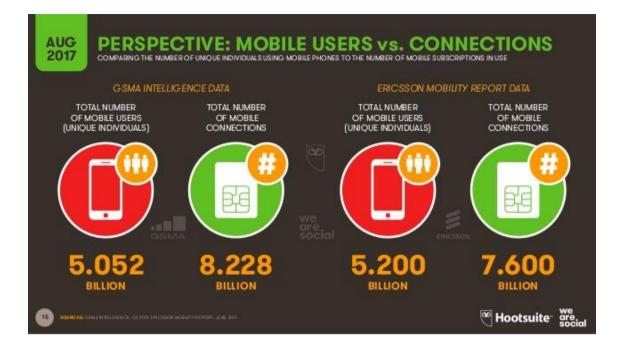
Share with participants on recent trend of agricultural revolution like traceability, Big Data, RS and Satellite Data, Block chain, IoT.(We need to be careful, when we talk about ICT, we should keep it in mind that ICT is all about Tools not a solution. We need to use these tools to get our solutions)

#### **Expected Outcome**

Understanding on the recent eAgriculture initiatives & potentials of adoption of ICT solutions as applicable for Bangladesh

#### Why ICT in Agriculture?

The recent trend of ICT usage has been increased significantly with diverse usage in both personal and professional domain including public & private sector. Agricultural sector also embraced ICT in different areas ranging from extension to planning, research to monitoring. Total no. of SIM Card (8.228 Billion) already exceeded the total global population (7.569 Billion). A major ICT user group belongs to agricultural communities, from farmers to corporate businesses.



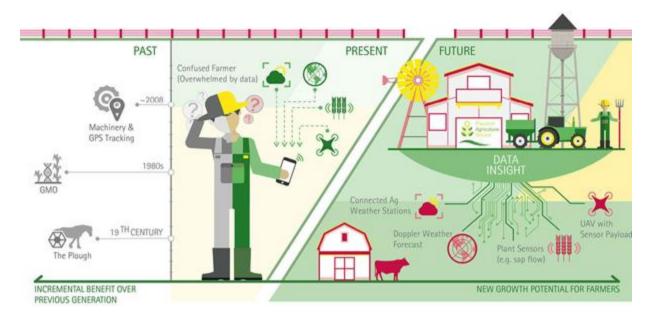
#### Total no. of Social Media Users

The social media user no. reached 2.818 Billion i.e. 37% of total population.



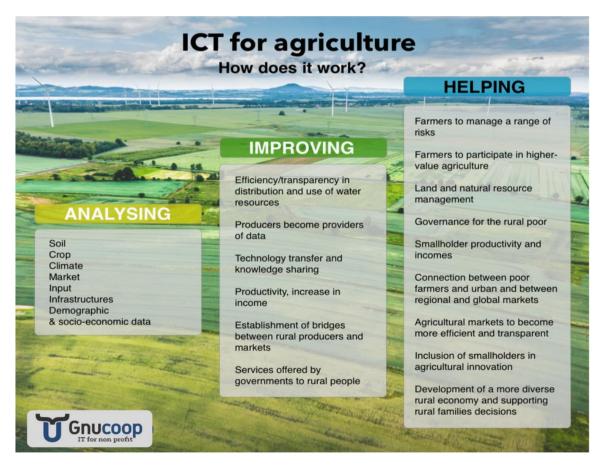
#### And ICT usage in agriculture is also increasing

As a supportive tool, ICT is increasingly used in agricultural sector which started from extension service delivery (basic eAgriculture) to critical Big Data analysis (Precision Agriculture). Research organizations including CGIAR institutes use ICT extensively.



#### Why?

ICT helps in 3 different stages, analyzing, improving and helping to support agricultural sectors.



#### A brief Matrix (ICT Tools and Services)

Agricultural extension services have a wide range of ICT propositions (Tools like Radio, TV, Video, Cell Phone, Mobile Apps, Data, Internet etc.) for different types of extension functions (Like Advisory services, Linking farmers to market, M&E, Survey, Awareness building etc.).

# **ICT Options in Relation to Extension Functions**

	Information and Communication Technology and Tools					
Extension Function	Radio	TV and Videos	Cell Phones (text, voice)	Smart Devices	PC, Internet tools	
Linking farmers to markets	Price reports		Access to price information (call in, subscriptions)	Can bring potential buyers and producers together; access price information	Can bring potential buyers and producers together; price info.	
Raise (general) awareness of opportunities	Very good	Visuals are usually very helpful as "seeing is believing"		Good option for intermediaries to seek information	Good option for intermediaries to seek information	
Provide technical information; demonstrate, or train	Some potential – but limited information delivered	Visuals are usually very helpful as "seeing is believing"	Some potential if farmers can call or text in and sufficient expertise is available	Additional potential to a simple cell phone as it enables web access and plays videos well.	Good option for intermediaries to seek information	
Diagnose problems and recommend solution	Some potential if dealing with general problems		Some potential if farmers can call or text in and sufficient expertise is available	Additional potential to a simple cell phone as it enables web access. Special diagnostics "apps" are already available.	Good, comprehensive tools are available	
Respond to follow up questions raised by clients	Good if producers can call or text in and sufficient expertise is available		Some potential if farmers can call or text in and sufficient expertise is available	Good option for intermediaries to seek information (if optimized for smart devices)	Good option for intermediaries to seek information	
Provide mass advisories	Excellent option	Excellent option	Is an option if users are registered to receive such messages (SMS)	Is an option if users are registered to receive such messages (SMS, email)	Is an option if users are registered to receive such messages (email)	
Facilitate access to credit and inputs			Mobile banking; negotiate directly with input suppliers	Mobile/Online banking	Online banking	
Assist with business planning				Simple farm management "apps"; record keeping	Farm management tools; record keeping	
Conduct surveys, M&E, enumerations			Some options exist	Many new tools and options, incl. GPS tracking	Mark Bell and Judith Payne, 2011	

#### ITU and FAO Developed the e-Agriculture Strategy

The <u>E-agriculture Strategy Guide</u> published by the Food and Agriculture Organization of the United Nations and the International Telecommunication Union provides a framework for countries in developing their national e-agriculture strategies. These strategies included an e-agriculture vision, an action plan, and a framework by which results can be monitored and evaluated. Like all strategies and plans, the outcomes of these processes are not static and changes in a country's strategic context will require a dynamic approach to updating the strategy so that it remains relevant. This <u>guide</u> consists of three parts to developing a national e-agriculture strategy: the vision development process; action plan; monitoring and evaluation. Adopting a national approach to e-agriculture will result in improved livelihoods and incomes for people living in rural communities.

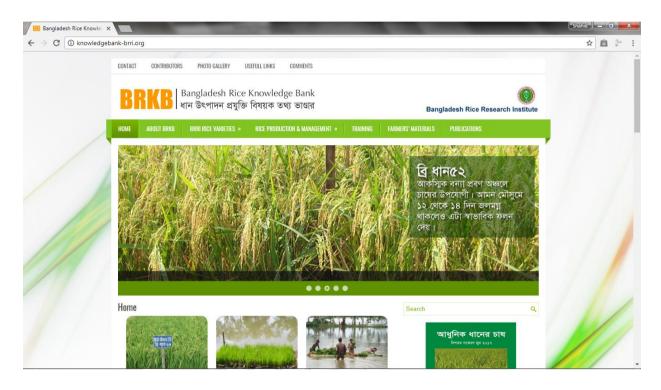
The Strategy Guide is available at http://www.fao.org/3/a-i5564e.pdf

#### **Few Examples**

Agricultural sector in Bangladesh also adopted ICT as an emerging tool at institutional level and the Digital Bangladesh mandate of the government enforced the mission to digitize service delivery as well as management system. Though the integration is still low and need more efforts from policymakers and respective organizations, there are initiatives which foster eAgriculture to become an integral component of the future growth of the agricultural sectors.

Here are few cases -

## **Rice Knowledge Bank by BRRI**



The Bangladesh Rice Knowledge Bank (BRKB) is a hub of technology relevant to rice and inspired by IRRI Rice Knowledge Bank, it is the most rich knowledge repository in the agricultural sector in Bangladesh. For details visit <u>http://knowledgebank-brri.org/</u>

#### **BARC Research Management System**

As the central of hub and lead of various research organizations of agricultural sector, BARC manage the Agricultural Research Management Information System (ARMIS) which enables researchers and policy makers to access various research outcomes in a single platform.

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# BARI Production Technology Database (Knowledge Products)

An ICT enabled platform of various production technologies of vegetables & other products.

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Visit the link at <u>http://bari.gov.bd</u> for more details.

## The Fertilizer Application of SRDI

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In most of the cases farmers don't use any scientific assessment or soil tests for fertilizer application in field. The Fertilizer Recommendation Software (FRS) enableusers to get appropriate advice on fertilizer utilization.

More information is available athttp://www.frs-bd.com/

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# Agricultural Marketing Department, MoA (Market Price Service)

# AIS – Call Centre, Electronic Copy of Krishi Kotha





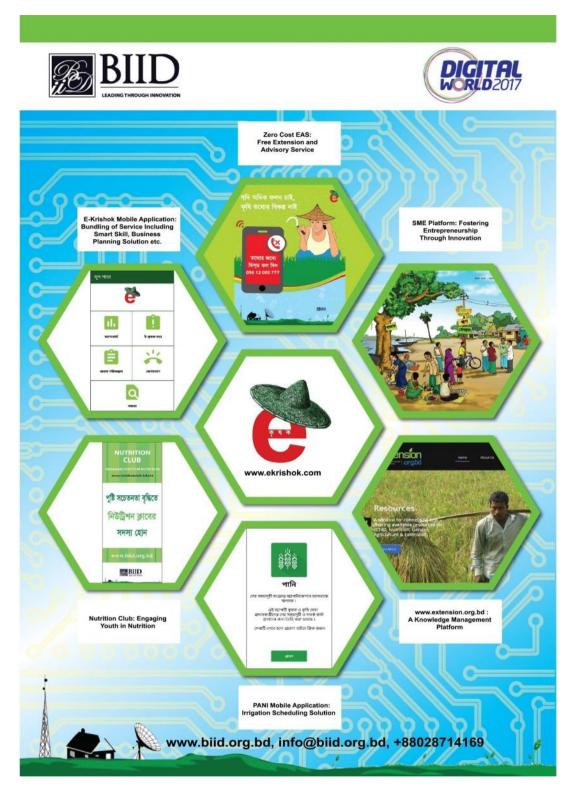
#### **Rice Doctor of IRRI**

The International Rice Research Institute (IRRI) developed the most popular and initial ICT based initiative titled Rice Doctor. This platform also offers services in Bengali. More details are available at <u>http://www.knowledgebank.irri.org/decision-tools/rice-doctor</u>



#### **BIID e-Krishok Service Portfolio**

Private sectoris in Bangladesh also contributing significantly in the field of eAgriculture.Bangladesh Institute of ICT in Development (BIID) has been in the field of ICT4D with special focus of eAgriculture with the flagship initiative e-Krishok. A bundle of services is available in e-Krishok portfolio including extension advisory service, business planning solution, irrigation scheduling, big-data for nutrition (SDG2) and agro-business development. eKrishok won different award from govt. & UN agencies. More details are available at <u>www.ekrishok.com</u>



There are various other initiatives, primarily driven by development projects, mostly funded by USAID, Dutch Government, Katalyst and others. Here are few examples –

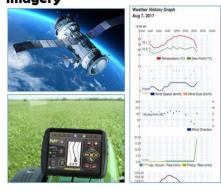
# Satellite Based Advisory Service for Potato

# **mPower's Initiatives**





A solution to predict Potato late blight disease based on data from ground sensors and satellite imagery



Geo-data based information services for smallholder farmers in Northern region of Bangladesh



Kranti Associatesand Intel Grameen solution for Soil Testing

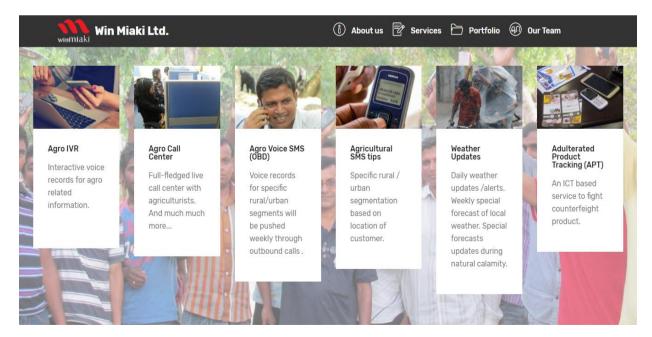


#### Video Based Extension and Learning activities by Digital Green



#### Win Miaki offers Bundle of services

Content is core in eAgriculture and Win Miaki has been very active in content development with diverse service propositions. More information is available at <a href="http://win.miaki.co/winweb\_02/">http://win.miaki.co/winweb\_02/</a>



**Telecom Operators Facilitate Research to Service Delivery** 

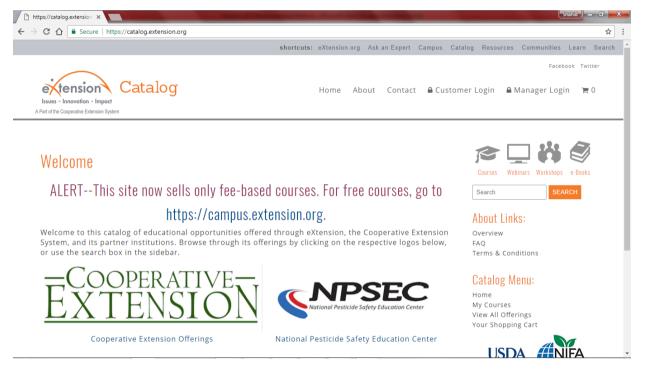
Mobile operators has played a very important role to facilitate service delivery i.e. information dissemination to large communities. Grameen Phone and Banglalink are the leading telecom operators to offer short code based advisory services (27676, 7676).

In addition, telecom operators are also contributing various other initiatives of government, development agencies and GSMA. More information is available at <a href="https://www.gsma.com/mobilefordevelopment/programmes/magri">https://www.gsma.com/mobilefordevelopment/programmes/magri</a>





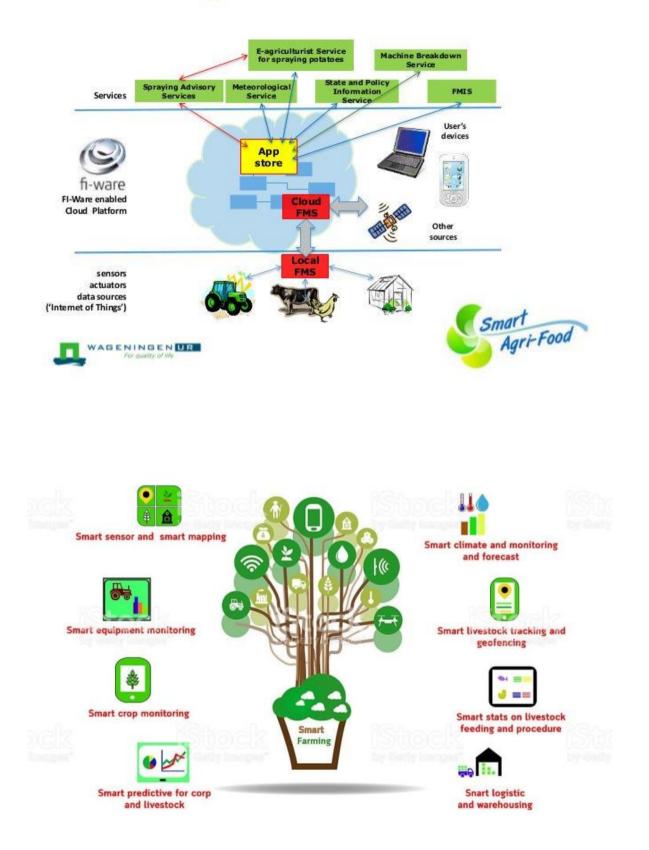
Extension Learning Programs (USA) for extension professional to offer access to educational programs on extension managed by land-grant universities.



#### What Next?

Cloud based agricultural solution will be the next move to enter into Smart Agriculture. Universities like Wageningen, The Netherlands foster the concepts to adopt the concept.

# Smart Farming in the Cloud



# **Closing Remarks**

ICT can play crucial role to transform our agriculture sector by making it SMART in terms of management, not only technology adoption rather using the tools properly and considering "Farming is Business and Farmer is an Entrepreneur"



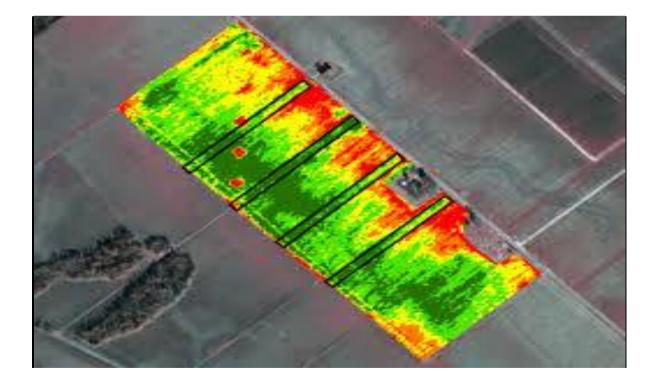
Thank You Question and Answer Session

# **Session- 9: Benefits of ICT Interventions in Agricultural Sectors**

Md Shahid Uddin Akbar

CEO, Bangladesh Institute of ICT in Development (BIID) shahid.akbar@biid.org.bd





#### **Objective of the Session**

- Identifying benefits (direct and indirect) of ICT usage in agricultural sectors and relevance to Bangladesh
- Setting a ground to adopt ICT enabled services as a decision making tool at different level with required skills and facilities.

#### **Expected Outcome**

- > Participants will have clarity on benefits of ICT usage in agricultural sector
- Empathetic willingness and approach to integrate e-Agriculture in Bangladesh

#### How ICT in agriculture contributing development?

ICT assist the agricultural sector across the value chain, from planning to extension, research to marketing. The strong capacity of ICT tools enables individuals and organizations to become more efficient and competitive. Here are some highlights on which areas ICT can contribute -

#### TELEPHONE .....> Interactive voice response COMPUTERS ·····> Agriculture information and markets AND WEBSITES BROADCASTING .....> Expertise sharing, advisory, community SATELLITE ·····> Weather, universal accessibility. remote sensing MOBILE ·····> Advisory, sales, banking, networking INTERNET ·····> Knowledge sharing, social media, AND BROADBAND e-community, banking, market platform, trading, etc. SENSOR ·····> Real time information, better data quantity NETWORKS and quality, decision making DATA STORAGE ····> Precision AND ANALYTICS agriculture, actionable knowledge

#### **Research and Development**

- Analysis and understanding
- Innovation
- Improvisation

#### Management and Planning

- Decision making system
- Monitoring and Supervision
- Forecasting
- Trend analysis

#### **Service Delivery**

- Awareness building and communication
- Making extension service more efficient
- Getting client feedback
- Simplify the operation

#### **Knowledge Management**

- Learning Facilities
- Documentation
- Networking
- Openness and public sharing

#### **Empowering Communities**

- Universal Access
- Gender Equity
- Social and economic justice for farmers

#### More competitive and more commitment

Globally agricultural sectors are more competitive and efficient than ever, quality, volume and nutritional security drive the sector with innovation and investment. Food safety (including traceability), climate change and global value chain are emerging issues which can be addressed through ICT applications. To cope up with the market and ensure achieving National Development Goals as well as SDG, we need to adopt ICT at every sphere of agricultural sectors. Bangladesh government is mandated for Digital Bangladesh and SDG set by UN.

#### **Smart Agriculture: Smart Future**

Precision agriculture, driven by ICT is the next level of agricultural revolution anyone can imagine. Bangladesh needs to use more and more ICT solutions in its agricultural value chain (Policy to Consumption) to make the agricultural sector more smart and build a better future.

#### **Closing Remarks**

The benefits of ICT usage are multi-fold, it helps to plan properly, manage efficiently and grow sustainably.

Thank You, Question and Answer Session

# Session- 10: Written Communication: Scientific/Technical Report Writing

M Harun-ur-Rashid Training & Communication Specialist, PMU, NATP-2

## 10.1 The Science of Scientific/Technical Writing

George Gopen and Judith Swan stated that "The fundamental purpose of scientific discourse is not the mere presentation of information and thought but rather its actual communication. It does not matter how pleased an author might be to have converted all the right data into sentences and paragraphs; it matters only whether a large majority of the reading audience accurately perceives what the author had in mind."

## 10.2 Skills Required for Scientific/Technical Writing

Writing skills are an important part of communication. Good writing skills allow you to communicate your message with clarity and ease to a far larger audience than through face-to-face or telephone conversations.

Unlike creative writing or opinion based writing, technical writing should help a reader understand a process, product, or subject in a clear and concise way. Technical writing is not written to entertain or distract the reader. Instead, it should be informative and clear. Technical writers, also called technical communicators, will prepare documents like instruction manuals, journal articles, and design documents that contain information for customers, consumers, designers, and manufacturers.

You might be called upon to write a report, plan or strategy at work; write a grant application or press release within a volunteering role; or you may fancy communicating your ideas online via a blog. And, of course, a well written CV or résumé with no spelling or grammatical mistakes is essential if you want a new job.

Today, when anyone can be their own publisher, we see more and more examples of poor writing skills both in print and on the web. Poor writing skills create poor first impressions and many readers will have an immediate negative reaction if they spot a **spelling** or **grammatical mistake**. As just one example, a spelling mistake on a commercial web page may cause potential customers to doubt the credibility of the website and the organization.

#### **10.3 Key Elements for Effective Scientific/Technical Writing**

Strong technical writers will plan their documents before writing them and state the information with clarity, brevity, and simplicity. They will also use the appropriate word choice, use the active voice as much as possible, and understand that technical writing is a process that may require editing or revising. Planning your written documents is one of the key steps to producing strong technical writing for a client. You should keep in mind the following elements during the planning stage.

- Identify your audience and their expectations
- Understand the purpose of the document
- Organize your supporting materials and outline the document
- Budget the necessary time to write, revise, and edit the document

Scientific writing, like all formal writing, involves a cycle (or multiple cycles) that includes (1) planning, which encompasses locating and reading source materials; (2) writing a rough draft; and (3) editing and proofreading. Writers aim for continuity and a logical flow of ideas. In scientific writing, all ideas must be supported by evidence, with appropriate citations of the source of the evidence.

Good Scientific/Technical Writers must practice the following:

- Planning
- Clarity
- Brevity
- Simplicity
- Word choice
- Active voice
- Committing to writing as a process

## Language: Weak vs. Strong

- Avoid too many "to be verbs is, was, were, has been, have been, etc
- > Avoid excess words, which slow comprehension of the main point

Weak	Strong
made arrangements for	arranged
made the decision	decided
made the measurement of	measured
performed the development of	developed
is working as expected	works as expected

# **10.4 General Format for Writing a Scientific/Technical Paper**

Scientists have established the following format for "scientific papers". A complete paper is divided into sections, in this order...

- Title Page
- Abstract
- Introduction
- Materials and Methods
- Results
- Discussion
- References
- Acknowledgments

Although this format is not cast in stone, most scientific journals use it or some variation thereof. By adhering to this format, researchers maintain a consistent and efficient means of communicating with the scientific community. This order is really quite logical and could apply to almost any report you might write. You can benefit from writing good scientific papers, even if you do not expect to go on in Biology. Preparing a scientific paper develops your ability to organize ideas logically, think clearly, and express yourself accurately and concisely. Mastery of these skills would be an asset for any career that you may pursue. All papers should be typed, double-spaced (except the abstract), with at least one-inch margins on all sides. Any statements not original to you should be properly cited in the text

margins on all sides. Any statements not original to you should be properly cited in the text using, and listed in the "References" section at the end of your paper using the style explained at the end of this article.

#### **Title Page**

The title page is the first page of the paper and should contain the following:

- An informative title
- Your full name or, if a group report, the full names of all group members
- Course number
- Instructor's name
- Your lab day and time
- Due date for the paper

A good title is informative, i.e. it summarizes as specifically, accurately, and concisely as possible what the paper is about. For example, if you were investigating the effect of temperature on the feeding preferences of a certain type of caterpillar found on tobacco plants, acceptable titles might be "Effect of Temperature on the Feeding Preferences of the Tobacco Hornworm Larvae, *Manduca sexta*", or "Does Temperature Influence which Diet the Tobacco Hornworm Larvae, *Manduca sexta*, will Select? The following titles would be uninformative and too general: "Effect of Temperature on Caterpillars"; "How Temperature Affects the Tobacco Hornworm Larvae, *Manduca sexta*?", "What is the Preferred Diet of the Tobacco Hornworm, *Manduca sexta*?"

#### Abstract

The second page of scientific paper begins with the Abstract. The Abstract states clearly and concisely what is dealt with in the paper. It is a concise statement of the questions, general procedure, basic findings, and main conclusions of the paper. This is a brief, all encompassing section summarizing what you discuss in the rest of the paper, and should be written last, after you know what you have said! The abstract should be written as one single-spaced paragraph (all other sections are double-spaced), and must not exceed 200-250 words. A good "Abstract"...

- states the question investigated and the principal objectives of the investigation,
- specifies the scientific context of your experiment,
- summarizes what you did,
- summarizes your results, and
- states your major conclusions.

#### Introduction

The Introduction presents a background for the work you are doing and put it into an appropriate context (e.g. scientific principles, environmental issues, etc.). What questions are you asking in your study? What organisms or ideas were studied and why are they interesting or relevant? Identify the subject(s) and hypotheses of your work. Tell the reader why (s)he should keep reading and why what you are about to present is interesting. Briefly state your general approach or methods (e.g. experimental, observational, computer simulation, a combination of these, etc.) as a lead-in to the next section. Cite any references you used as sources for your background Information. Any statements not original to you should be properly cited in the text using the scientific citation style, and listed in the "References" section at the end of your paper.

This section should be written in the past tense when referring to this experiment. However, use the present tense when discussing another investigator's published work. Why? Previously published work is considered part of the *present* body of knowledge. A good "*Introduction*" will....

- include a clear statement of the problem or question addressed in the experiment,
- state the hypothesis or hypotheses that you tested in the study,
- put the question into some context by stating why this is an important question to be answered and/or why you found this to be a particularly interesting question,
- state the objectives of the research,
- address how the research helps to fill holes in our knowledge,
- include any background material that is particularly relevant to the question,
- give a brief overview of the method of the investigation. If deemed necessary, the reasons for the choice of a particular method should be stated, and
- state the principle results and conclusions of the investigation. Do not keep the reader in suspense. Let the reader follow the development of the evidence.

#### **Materials and Methods**

The "Materials and Methods" section tells how the work was done. There should be enough detail that a competent worker can repeat the experiments. What procedures were followed? Are the treatments and controls clearly described? Does this section describe the sampling regime and sample sizes, including how individuals were assigned to treatments? What research materials were used: the organism, special chemicals, concentrations, instruments, etc.? Briefly explain the relevance of the methods to the questions you introduced above (e.g. "to determine if light limited algal growth, I measured...."). If applicable, include a description of the statistical methods you used in your analysis.

Careful writing of this section is important because the cornerstone of the scientific method requires that your results are reproducible, and for the results to be reproducible, you must provide the basis for the repetition of your experiments by others. Avoid lab manual or "cook book" type instructions. This section should be written in the past tense.

#### Results

The "Results" section presents in words the major results of the study. Your data should b presented succinctly in the body of the report <u>and</u> presented in detail as tables or graphs. However, do not present the same data in both tabular and graphical form in the same paper. Strive for clarity, the results should be short and sweet. <u>Do not attempt to discuss the interpretation of your data-this should be done in the "Discussion" section.</u>

The results section should be written so that any college student could read the text to learn what you have done. For example, you might use a paragraph to explain what is seen on a particular graph;

"... When the enzyme as soaked in sulfuric acid, it produced no change in absorbance...." Do not make the common mistake of saying, "We performed the experiment, see figures 1-4." That is too brief and does not convey to a novice what you have done. When stating your results in the body of the text, refer to your graphs and tables.

Tables and graphs alone do not make a Results section. In the text of this section describe your results (do not list actual numbers, but point out trends or important features). Refer to the figures and tables by number as well as any other relevant information. "See Figures" is not sufficient. Results are typically not discussed much more in this section unless brief discussion aids clarity. In referring to your results, avoid phrases like 'Table 1 shows the rate at which students fall asleep in class as a function of the time of day that class is taught." Rather, write: "Students fall asleep in class twice as frequently during evening than day classes (Table 1)." The results section should avoid discussion and speculation. This is the place to tell the reader what you found out, not what it means.

Each table and figure should be numbered sequentially for easy reference in the text of the Results and Discussion sections. Figures (e.g. graphs and diagrams) are numbered consecutively as Figure 1 to Figure X. Be sure to label both axes of all graphs (e.g. growth rate, height, number of species, water consumed, etc.), include units (e.g. meters, liters, seconds, etc.), and define all treatments. Labels such as "treatments 1,2,3, and 4" are not sufficient. Tables are numbered separately from the figures as Table 1 to Table X. Label columns, including units of measure, and define all treatments.

Your reader should <u>NEVER</u> have to go back to the text to interpret the table or figure-- thus you need to provide a legend for each figure and a caption for each table. A figure legend is freestanding text that goes *below* the figure. The first sentence of the legend (bold print in the example below) is typically a succinct statement that summarizes what the entire figure is about. The first sentence is then followed with particulars of the figure contents, as appropriate, including information about methods, how the data are expressed, or any abbreviations etc. An example of a legend...

**Figure 1. Light Micrograph of a Human Karyo type.** Fetal cells were obtained from Aimee Biophiliac in September 1998 by amniocentesis. The cells were cultured, metaphase chromosome spreads were prepared and the chromosomes stained and photographed as described in Materials and Methods. Individual chromosomes were cut out from the photograph and arranged in a karyo type. By virtue of the presence of two X-chromosomes, the karyo type indicates that the developing fetus is a female. Based on other information (data not presented), the fetus is expected to emerge March 19, 1999.

A table caption is freestanding text located *above* the table. It presents a succinct statement of the contents of the table. An example is...

#### Table 1. Uptake of Various Electrolytes by Rhinoceros Cells in Culture.

A caption must NOT include information about methods, how the data are expressed, or any abbreviations--- if needed, those are included as footnotes to the table, with each footnote keyed to a footnote reference in the table by sequential, lettered superscripts.

#### Discussion

The discussion section is where you explain your results in detail, speculating on trends, possible causes, and conclusions. Try to present the principles, relationships, and generalizations shown by the Results. And bear in mind, in a good Discussion, you discuss--you do not recapitulate-- the Results. Don't be shy; discuss the theoretical implications of your work, as well as any possible practical applications.

A good discussion section...

- states what conclusions can be drawn from the results (Present major findings first, then minor ones; Use your data to support these conclusions),
- compares your results with those of other workers and cites the references used for comparisons,
- puts your results in the context of the hypotheses and other material in your Introduction,
- indicates where your data fits in to the big picture,
- addresses problems that arose in your study and how could they be avoided in the future,
- will attempt to explain why results might be inconsistent with the predictions you made (what you thought would happen before you did your study, based on a specific hypothesis or other background information),
- explains any exceptional aspects of your data or unexpected results,
- examines your results for possible errors or bias,
- recommends further work that could augment the results of the study you have presented, and
- states your major conclusions as clearly as possible, using specific examples from

# your data!! References (or References Cited)

The References section is a complete list of all references that you cited within your paper. The references are listed in alphabetical order by last name of the first author of each publication. Include only those references that you have actually read and that you specifically mention in your paper. If a laboratory handout was used it is only a beginning and must be cited.

When researching for information for the Introduction and Discussion sections or the paper, seek out original sources that are written by experts in the field (e.g. articles found in scientific journals such as *Science, Nature, Proceedings of the National Academy of Sciences, New England Journal of Medicine*, etc.) or authoritative magazines (e.g. *Scientific American*) and books written by well respected scientists. Textbooks, although acceptable in this class as a last resort, are rarely cited in the scientific papers since information in textbooks is less reliable than from the original sources.

# **In-Text Citations**

Citation formats are often discipline specific. Footnotes or endnotes are not normally used in scientific writing as they are in humanities and the social sciences. Because natural scientists most often use the Name-Year System, we will use this system in this course. All citations occur in the text in parentheses, with the author(s) and date of publication. For example: Clinton (1999) found that naked foxes run on grass four times faster than those wearing pantyhose do. Alternatively: On grass surfaces, naked foxes run four times faster than those wearing pantyhose (Clinton 1999). It's as easy as that! If there is more than one author of a source, simply use the first author's last name, followed by et al., Latin for "and others". For example, (Clinton et al. 1999). The complete list of authors will appear in the full citation at the end of your paper.

The format of the References section varies slightly from one scientific journal to another. Every scientific journal provides an "Instructions to Authors" that describes the format for the References section and all other requirements for papers they will accept. Use the following as examples for citing various kinds of sources in for this course....

# **Citing Journal and Magazine Articles**

#### Format

Author(s). Publication year. Article title. *Journal title* volume: pages.

#### Examples

Smith, D.C. and J. Van Buskirk. 1995. Phenotypic design, plasticity and ecological performance in two tadpole species. *American Naturalist* 145: 211-233.

Ahlberg, P.E. 1990. Glimpsing the hidden majority. Nature 344: 23.

Epel, D. and R. Steinhardt. 1974. Activation of sea urchin eggs by a calcium

ionophore. Proc. Natl. Acad. Sci. (USA) 71: 1915-1919.

# Citing Journal and Magazine Articles with no Identifiable Author

# Format

Anonymous. Publication year. Article title. Journal title volume: pages

#### Example

Anonymous. 1976. Epidemiology for primary health care. *International Journal of Epidemiology* 5: 224-225.

#### **Citing Books**

#### Format

Author(s). Publication year. *Book Title*, edition if known. Publisher, Place of publication, number of pages.

#### Example

Purves, W.K., G.H. Orians and H.C. Heller. 1995. Life: *The Science of Biology*, 4th edition. Sinauer Associates, Inc., Sunderland, MA, 1195 pps.

#### Citing Book Chapters

#### Format

Author(s). Publication year. Chapter title. In: *Book title* (Author(s)/editors, first name first) Place of publication, pages.

#### Example

Jones, C.G. and J.S. Coleman. 1991. Plant stress and insect herbivory:

Toward an integrated perspective. In: *Responses of Plants to Multiple Stresses* (H.A. Mooney,

W.E. Winner & E.J. Pell, editors), Academic Press, San Diego, pp. 249-280.

## **Citing Newspaper Articles**

#### Format

Author(s). Date (Year/Month/Day). Article title. *Newspaper title* Section: Page: Column.

#### Examples

Bishop, J. E. 1982 November 4. Do flies spread ills or is that claim merely a bugaboo? *The Wall Street Journal* 1: 1: 4.

Williams, M. 1997 January 5. Teaching the net. Seattle Times C: 1: 2.

#### Citing Newspaper Articles with no Identifiable Author

#### Format

Anonymous. Date (Year/Month/Day). Article title. *Newspaper title* Section: page: column.

#### Example

Anonymous. 1977 September 6. Puffin, a rare seabird, returns to where many were

killed. The New York Times 3:28:1.

#### Citing Sites on the Internet

The complete web address should be presented so that anyone else could easily visit the same website. Attempt to include the following elements (not all elements appear on all Web pages):

- 1) author(s) (last name, first initial)
- 2) date created or updated
- 3) title of the page
- 4) title of the complete web site (if different from the page)
- 5) URL (full web address)
- 6) the date accessed.

#### Format

Author's last name, First initial. (date created or updated). *Title of the page*. Title of the complete site. [Online]. Available: http://full.web.address. [Date accessed].

#### Example

Hammett, P. (1997). *Evaluating web resources*. Ruben Salazar Library, Sonoma State University. [Online]. Available: http://libweb.sonoma.edu/Resources/eval.html. [March 29, 1997].

#### Citing a Lecture

#### Format

Lecturer's last name, First initial. Lecture. Location of Lecture, Date, Room number.

#### Example

Greengrove, C. Lecture. UW-Tacoma, 8 January 1997, TLS490sc.

#### Citing a Video

#### Format

*Title of video* (videocassette). editor or director. Producer's name, producer. [Location of Production]: Organization responsible for production, Year.

#### Example

*New horizons in esthetic dentistry* (videocassette). Wood, R. M., editor. Visualeyes Productions, producer. [Chicago] : Chicago Dental Society, 1989.

#### Citing a Thesis or Dissertation

#### Format

Author. Publication year. Title [dissertation]. Publisher: Place of publication, number of

pages. Available from: University Microfilms, Ann Arbor, MI; DAI number.

#### Example

Ritzmann RE. 1974. The snapping mechanism of Alpheid shrimp [dissertation]. University

of Virginia: Charlottesville (VA). 59pp. Available from: University Microfilms, Ann Arbor, MI; AAD 74-23.

# **Citing Government Report**

## Format

Author/Agency (if no author). Publication year. Title. Publisher, Place of publication, number of pages.

# Example

Mitchell, R.G., N.E. Johnson and K.H. Wright. 1974. Susceptibility of 10 spruce species and hybrids to the white pine weevil (= Sitka spruce weevil) in the Pacific Northwest. PNW-225. U.S. Department of Agriculture Forest Service, Washington, D.C., 8 pp.

# Acknowledgments

In this section you should thank anyone who has helped you in any aspect of this project. (e.g. "I thank William Gates for help with the computer program, Spike Lee for reading my pH meter, Al Gore for counting cockroaches, and Dewey, Cheetham, and Howe for valuable discussions of the ideas underlying these data).

Section	Information in Section	Page (typed manuscript)
Title page	Identifies topic/variables studied and provides authorship information	Start on new page (page- 1)
Abstract	Provides very brief summary of information from major sections of report	Start on new page (page- 2)
Introduction (or Body of empirical report)	<ul> <li>Indicates purpose and importance of research and reviews prior research literature and theory</li> <li>In an empirical report, the introduction typically concludes with specific hypotheses that follow from information in the literature review</li> <li>In a review article, the literature review and theoretical information are more extensive than in an empirical report and constitute the body (main part)</li> </ul>	Start on new page (page- 3)
Method	In an empirical report, provides sufficient information about participants, design, materials, and procedures so that interested readers might replicate (repeat) the research	No new page
Results	In an empirical report, provides detailed information about the findings and includes results of statistical	No new page

	analysis for quantitative research	
Discussion (and/or Conclusion)	<ul> <li>Offers interpretation of results, their theoretical implications, limitations of the research, potential applications of the findings, and ideas for further research</li> <li>In an empirical report, the discussion typically includes a focus on whether results supported specific hypotheses presented in the introduction and a explanation of why hypotheses were (or were not) supported</li> </ul>	No new page
References	Lists authorship and source information for all items cited in report or article to enable readers to locate original sources	Start on new page

# Session-11: Tips for Writing Success Stories

M Harun-ur-Rashid Training & Communication Specialist, PMU, NATP-2

# 11.1 What Is a Success Story?

A success story shows Extension making a difference in people's lives. More than a list of events or activities, it describes a positive change and shows how that change benefits the people of 10 old Upazilas under SCDC component around Bangladesh. A good success story uses evidence from evaluation to show the value of Extension.

You can write a success story about an entire program or part of a program that is particularly noteworthy and significant. It may be about an innovation, emergency response or outstanding effort. The program may be complete or in an earlier stage of development but with important accomplishments to describe. You could even write a success story several years after a program's completion when you have collected evidence of long-term impact. For a multi-year initiative, you may write a series of success stories that describe significant but different changes that occur over the years.

Whatever you choose to write about, your story should show Intervention making a better impact to live — for individuals, families, organizations, businesses, local governments and communities.

## 11.2 What Goes Into a Success Story: SRRE

Situation: What prompted the program? Response: How did Extension respond? (Inputs and outputs) Results: Who benefited? What resulted? (Outcomes) Evidence: What's the evidence? (Evaluation)

**Situation:** Tell why SCDC started the program. What problem, issue or concern needed addressing? Who cares? Who are the key stakeholders? The opening should make the case for why intervention stepped in.

**Response:** Describe intervention response including inputs (staff, funding, volunteers, research, and expertise) and outputs. Outputs include activities (teaching, facilitation, product development) and people reached (number of people and demographics). Describe partnerships and external funding sources. Be sure to spell out intervention's role in programming. Although we often work with other agencies and teams, it's important to emphasize intervention's contribution.

**Results:** Use quantitative and qualitative data to describe important outcomes (changes and benefits) achieved as a result of intervention's response. Who benefited and how? Outcomes include changes in knowledge, skills, motivation, behavior, decision making, practices,

policies, social action, social, economic and environmental conditions. Describe outcomes in terms of value or meaning. For example, "Thirty participants increased their knowledge of safe food-handling practices (outcome). This should lead to better food-handling practices and fewer food-borne illnesses" (expected value). In other words, help the reader understand the meaning behind the change. If possible, and include future plans or lessons learned based on results.

**Evidence:** Briefly describe how you evaluated the program to attain the reported evidence. Include the data collection method (pre- or post-test surveys, interviews, and testimonials), sample (number and how selected), response rate and the date of data collection. Remember — a good success story depends on credible information.

# **11.3 Success Story Template**

Template that individuals can fill in; with instructions for completing and transferring to story: In the template's narrative section include the following headings — SITUATION, RESPONSE, RESULTS, EVIDENCE -- and write your success story as a story rather than separate, disconnected sections.

## Formatting features:

- Times New Roman, 12 point
- Single space within paragraphs, double space between paragraphs
- Left justify headers and text
- Bold headers
- 1.5-inch margins
- Short paragraphs and active tense
- Names, not "this agent"
- Avoid bullets, special fonts or features since they may not transfer to the web

A success story cannot exceed 4,000 characters. To stay within the limit, compose your story in MS Word and use "word count" under Tools to do a character count.

# 11.4 Why to Write Success Stories?

- To show accountability for donor funds
- To verify that we are using resources to make a positive difference in people's lives
- To share successes so individuals in and out of intervention can learn from our results
- To spread the word about intervention as a valuable resource
- To show that numbers alone don't tell the whole story of Intervention
- To reflect and learn from our work
- To practice good learning

# 11.5 What Makes a Good Success Story?

#### A good success story:

- Describes results that are valued by clients
- Contains compelling, significant facts
- Catches your attention
- Tells who benefits
- Answers: "So what?"
- Spells out intervention's role in achieving results
- Is easy to read and understand
- Identifies key partners and funders

# 11.6 When to Submit Success Stories?

- When you have something significant to report and evaluation data to back it up
- When you are proud of a program or initiative
- On an ongoing basis don't wait until the end of the year

# **11.7 Good Success Story Writing Tips**

It's one thing to have a good story to tell. It's another to write it so that people will want to read it. Use the following tips and many resources on the Internet for help in writing your success stories.

- Use active voice
  - Example: Passive: Wells were tested by 80 percent of the participants. Active: Eighty percent of the participants tested their wells.
  - Use short, complete sentences
- Be concise
- Choose simple words
- Avoid jargon
- Avoid acronyms
- Use your name, program name or country name rather than "this agent," "Extension" or "l".
- Write in paragraph style in complete sentences
- Ask your communications specialist for help