

e-Extension for Extension Professionals



FACILITATOR GUIDE

Global Forum for Rural Advisory Services (GFRAS)
c/o Agridea, Eschikon 28, 8315 Lindau, SWITZERLAND
Phone +41 (0)52 354 97 64, Fax +41 (0)52 354 97 97
info@g-fras.org, www.g-fras.org



Contents

Module 1: e-Extension for Extension Professionals.....	4
Pre-assessment	4
Study Unit 1: Introduction to e-extension.....	5
Session 1.1: Context setting and background (COVID-19).....	5
Activity 1.1 Individual activity.....	5
Session 1.2: Definition and evolution of e-extension	6
Activity 1.2 Individual activity.....	6
Session 1.3: Purpose and major functions of e-extension	7
Activity 1.3 Individual activity.....	7
Session 1.4: Advantages and disadvantages of e-extension.....	8
Activity 1.4 Individual activity.....	8
Summative assessment: Unit 1.....	9
Theoretical assessment	9
Study Unit 2: Undertaking e-extension activities.....	10
Session 2.1: Moving from physical to online activities.....	10
Activity 2.1: Individual activity	10
Session 2.2: Developing a strategy	11
Activity 2.2 Individual activity.....	11
Session 2.3: Synchronous and asynchronous communication	12
Activity 2.3 Individual activity.....	12
Session 2.4: Synchronous e-extension tools	13
Activity 2.4 Individual activity.....	13
Session 2.5: Asynchronous e-extension tools.....	15
Activity 2.5 Individual activity.....	15
Summative assessment: Unit 2.....	17
Theoretical assessment	17
Study unit 3: e-Extension case studies and COVID-19 experiences	18
Session 3.1: 1917 iTEAMS (Integrated Technology Enabled Agri-Management System), Meghalaya State, India.....	18
Activity 3.1 Individual activity.....	18
Session 3.2: Farm Radio International, Africa	18
Activity 3.2 Individual activity.....	18
Session 3.3 UPTAKE Project, Tanzania	18
Activity 3.3 Individual activity.....	18
Session 3.4. Knowledge Innovation Repository of Agriculture in the North-East (KIRAN) -SMS Gateway, India	18
Activity 3.4 Individual activity.....	18
Session 3.5. Khushaal Zamindar- A mobile agriculture service by Telenor Pakistan	19

Activity 3.5 Individual activity.....	19
Session 3.6. Social Media- WhatsApp, Kerala, India	19
Activity 3.6 Individual activity.....	19
Session 3.7. Social Media: YouTube, India	19
Activity 3.7 Individual activity.....	19
Session 3.8. Network for Information on Climate Exchange (NICE), India	19
Activity 3.8 Individual activity.....	19
Session 3.9: Online Surveys: ICT4RAS interest group of GFRAS-Global Survey on Social Media	20
Activity 3.9 Individual activity.....	20
Summative assessment: Unit 3.....	21
Study unit 4: Concluding thoughts	23
Session 4.1: Best-fit functions and conditions	23
Activity 4.1 Individual activity.....	23
Session 4.2: Steps for e-extension success	23
Activity 4.2 Individual activity.....	23
Summative assessment: Unit 4.....	24
Theoretical assessment	24
Post-assessment.....	25

Module 1: e-Extension for Extension Professionals

Pre-assessment

After reading through the preface and introduction, complete the following pre-assessment to determine how comfortable you are with the topic of motivation. Rate your knowledge on the topics on a scale of 1 to 5 by circling the corresponding number.

	Question	Self-assessment				
		Low		High		
1	How well can you describe what e-extension is and how it has evolved over time?	1	2	3	4	5
2	How confident are you to outline the purpose and major functions of e-extension in Agricultural Innovation Systems?	1	2	3	4	5
3	How well can you detail the advantages and disadvantages of e-extension?	1	2	3	4	5
4	How confident are you to choose the most appropriate type of e-extension tool for your situation?	1	2	3	4	5
5	How well can you compare and contrast the key asynchronous e-extension tools?	1	2	3	4	5
6	How able are you to understand several best practice case studies in e-extension?	1	2	3	4	5
7	How well can you outline the steps to success with e-extension in the real-world?	1	2	3	4	5
8	How confident are you to try a new extension tool that you haven't used before?	1	2	3	4	5
9	How well can you describe what e-extension is and how it has evolved over time?	1	2	3	4	5

Learner's own answer

Study Unit 1: Introduction to e-extension

Session 1.1: Context setting and background (COVID-19)

Activity 1.1 Individual activity

1. Briefly describe the impact of COVID-19 on extension practitioners and how it has limited their work. (5)

Answer: The physical distancing requirements of COVID-19 have restricted extension professionals from undertaking their normal activities, such as travelling and meeting with farmers physically in the same place.

2. How can e-extension help the way we operate in an AIS? (5)

Answer: e-extension allows us to better engage with the multiple stakeholders in an AIS. The e-extension tools allow us to provide targeted messages to the different sectors in a quick and often inexpensive way.

Total: 10 marks

Session 1.2: Definition and evolution of e-extension

Activity 1.2 Individual activity

1. Complete this sentence... e-extension can be defined as: The use of _____ technologies to enhance _____ extension approaches (such as written and _____) so as to enable change. (6)

Answer: Complete sentence... e-extension can be defined as: The use of electronic technologies to enhance traditional extension approaches (such as written and face-to-face) so as to enable change.

2. What were some of the earliest uses of e-extension? (4)

Answer: Websites, bulletin boards and Listserv groups.

Total: 10 marks

Session 1.3: Purpose and major functions of e-extension

Activity 1.3 Individual activity

1. Put the following activities in their correct order:

Activities

Outcome

Objectives (3)

Answer

1. Outcome

2. Objectives

3. Activities

2. Why should you consider both low- and high-tech solutions for working with farmers? (3)

Answer: Not all farmers may have access to the technology required for high tech solutions, while most should have access to simple low-tech ones.

3. Provide a low-tech and a high-tech solution to replace the following traditional extension activities.

a. A one-on-one meeting

b. Small workshop (with up to 15 farmers) that requires a workbook

c. Paper-based survey (9)

Answer

a. *Low tech solution: phone the farmer*

High tech solution: video chat or web meeting

b. *Low tech solution: post out workbooks and tele-conference with the farmers*

High tech solution: email a PDF of the workbook and then use a web meeting

c. *Low tech solution: phone each farmer*

High tech solution: use an online survey

Total: 15 marks

Session 1.4: Advantages and disadvantages of e-extension

Activity 1.4 Individual activity

1. List FIVE advantages of e-extension. (5)
2. List FIVE disadvantages of e-extension. (5)
3. How can you still meet with your farmers face-to-face while physically distancing? (5)

Answer

1. Any five of the following:

- *Can still continue engaging with farmers*
- *Less time spent travelling,*
- *Save transport costs*
- *Save accommodation costs*
- *Relatively cheap to use e-extension tools*
- *Webinars can help you better engage with your clients, be more innovative and responsive to their needs*

2. Any five of the following:

- *List as many disadvantages of e-extension as you can.*
- *Digital divide (those who don't have suitable access to the internet),*
- *Not all people have access to the necessary equipment or the interest (need to consider age demographics),*
- *Can be a steep learning curve*
- *Nowadays there can be too many online meetings, which can be energy draining, leading to Zoom fatigue*
- *It's easy to be overwhelmed by the number of online meetings*

3. *Use web meetings, as you can still see their faces during the online meeting.*

Total: 15 marks

Summative assessment: Unit 1

Theoretical assessment

Answer the following questions in your own words.

1. Define e-extension in your own words. (5)

Answer

It is the use of electronic technologies to enhance traditional extension approaches (such as written and face-to-face) so as to enable change.

2. Explain why e-extension is a useful tool for the modern extension practitioner. (10)

Answer

- E-extension allows us to still meet “face-to-face” with our farmers whilst physically distancing.*
- It allows us to easily and cheaply communicate with the various AIS stakeholders in our extension projects.*
- It can complement our traditional extension activities (e.g. paper-based resources and physical meetings).*
- It can help us work more efficiently (less travel time, cost and accommodation).*
- It can improve our life balance by spending less time travelling and more time at home with family and friends.*

3. What are some of the challenges of using e-extension? (10)

Answer

- Due to the digital divide, not all our target market have suitable access to the internet.*
- Not everyone has access to the necessary equipment.*
- Not everyone is interested in using the new technologies (need to consider age demographics).*
- Can be a steep learning curve.*
- Nowadays there can be too many online meetings, which can be energy draining, leading to Zoom fatigue.*
- It's easy to be overwhelmed by the number of online meetings.*
- Like anything new, it can take time to master and have a steep learning curve.*

Total: 25 marks

Study Unit 2: Undertaking e-extension activities

Session 2.1: Moving from physical to online activities

Activity 2.1: Individual activity

1. Is it likely that e-extension will replace human involvement with extension programs? (5)

Answer

No, it is unlikely to happen, as humans still need to design and drive most of the work undertaken.

2. Describe the advantages of eSurveys. (15)

Answer:

- Creating an eSurvey is often much faster than typing up a traditional paper-based survey.*
- It is quick and easy to test it, as you just have to email it to your test subjects.*
- It is also quick and easy to electronically distribute it to your target audience.*
- There is no need for data entry, as the respondents have done that for you, and you no longer need to decipher their handwriting.*
- The overall process might only take six working days, instead of over six weeks.*

Total: 20 marks

Session 2.2: Developing a strategy

Activity 2.2 Individual activity

Add the appropriate words to complete the steps for a simple extension strategy:

1. Define the desired _____;
2. Identify the _____(s) and their characteristics;
3. Define SMART _____ (specific, measurable, achievable, relevant and time-bound);
4. Determine the various _____ required; and
5. Design a _____ and _____ framework. (10 marks)

Answer

1. Define the desired outcomes;
2. Identify the target audience(s) and their characteristics;
3. Define SMART objectives (specific, measurable, achievable, relevant and time-bound);
4. Determine the various activities required; and
5. Design a monitoring and evaluation framework.

Session 2.3: Synchronous and asynchronous communication

Activity 2.3 Individual activity

1. In your own words, describe the difference between synchronous and asynchronous communication, and provide an example of each. (10 marks)

Answer

Synchronous is where all the participants are engaged in an activity at the same time, such as a phone call. Asynchronous is where the participants can each engage in the activity at a time that suits them, such as replying to an email.

Session 2.4: Synchronous e-extension tools

Activity 2.4 Individual activity

1. Describe the two different types of phone calls. (2 marks)

Answer

Traditional phone call between two people and a tele-conference between multiple people.

2. What does IVR stand for? (3 marks)

Answer

Interactive Voice Response

3. Describe the best practice approach for conducting tele-conferences (10 marks)

Answer

- *Circulate an agenda beforehand and the list of attendees.*
- *The host should join several minutes early.*
- *Host welcomes each new attendee.*
- *Start the formal meeting on time and list those in attendance.*
- *Then wait before acknowledging further attendees so as to not disrupt the flow of the meeting.*
- *Ask people questions by name to ensure everyone speaks.*
- *Summarise the discussion at the end and any action items.*
- *Finish on time.*

4. What equipment do you need for a web meeting? (5 marks)

Answer

A suitable mobile phone, tablet or a computer with access to the internet. An external webcam and audio headset will improve the meeting experience.

5. What are some ways you can engage your audience in a web meeting? (5 marks)

Answer

- *Ask them to raise their electronic hand in response to a question you ask.*
- *You could conduct a poll.*
- *Ask them to type responses into the chat box.*

6. What are some advantages of using online polls? (5 marks)

Answer

- *It keeps your audience engaged.*

- *It helps you better understand their background and motivation.*

Total: 30 marks

Session 2.5: Asynchronous e-extension tools

Activity 2.5 Individual activity

1. Complete this sentence: Social media is a broad group of _____ applications that enable _____ interaction and _____ of content by users. (5 marks)

Answer

Social media is a broad group of electronic applications that enable two-way interaction and sharing of content by users.

2. How should you respond to negative, attacking social media posts? (10 marks)

Answer

- *Respond quickly and calmly.*
- *Take the conversation offline.*
- *Respond with a neutral response rather than deleting the comment, as that can cause more problems.*

3. Describe some best practice approaches for using eSurveys. (10 marks)

Answer

- *Keep the number of questions to a minimum, as the more questions you add, the lower the number of responses you can expect to receive.*
- *Start with easy-to-answer type questions (such as multiple choice) and progress to more difficult to answer ones (such as open ended questions).*
- *Avoid yes/ no type questions and instead use rating scales of five or seven units to gain more meaningful feedback.*
- *Send a follow up reminder about a week after sending the initial request.*
- *Be strategic about the number and frequency of surveys you choose to use.*

4. Outline the advantages and disadvantages of YouTube videos. (10 marks)

Answer

Advantages

- *Videos can be watched and easily understood by those with low literacy skills.*
- *They can be easily watched over and over again if the concepts are difficult to grasp.*
- *Videos can save you repeating the same message over and over again to different people.*
- *You could ask your farmers to watch the video first at their leisure and then will visit their farm to discuss it further.*

Disadvantages

- *Not everyone has the equipment to create and watch videos.*
- *If your video is reliant on footage of a seasonal activity, such as a crop fruiting, you may need to have to wait for that to next be happening.*

5. What are some best practice guidelines for using eBulletins? (10 marks)

- *Encourage your farmers to sign up for your eBulletin themselves, so as to not be seen as a spammer.*
- *Use a double opt in-process, so as people subscribe they will receive an email with a link to confirm that they want to subscribe to your eBulletin.*
- *Personalise your message by inserting the relevant name field as a salutation at the beginning of your message.*
- *Add relevant photographs to your eBulletin to reinforce your message.*

Total: 45 marks

Summative assessment: Unit 2

Theoretical assessment

Answer the following questions in your own words.

1. What are the five steps to creating a simple extension strategy? (10 marks)

Answer

- 1. Define the desired outcomes;*
- 2. Identify the target audience(s) and their characteristics;*
- 3. Define SMART objectives (specific, measurable, achievable, relevant and time-bound);*
- 4. Determine the various activities required; and*
- 5. Design a monitoring and evaluation framework.*

2. Describe the main way to divide the wide range of electronic communication tools, and provide three examples of each. (10 marks)

Answer

Synchronous: all the participants are engaged in an activity at the same time e.g. telephone, radio, web meeting, online polling.

Asynchronous: participants can each engage in the activity at a time that suits them e.g. social media, direct messaging, online document collaboration, online surveys, YouTube videos, eBulletins.

3. Describe the difference between online polling and online surveys. (10 marks)

Answer

Online polling is synchronous and can be used during a physical meeting or web meeting to engage the audience and better understand their background and motivation.

Online surveys (eSurveys) are asynchronous and offer a quick and easy way to receive feedback about an event or similar.

4. Provide an example of how YouTube videos and eBulletins can be used together to effectively communicate a message to your audience. (10 marks)

Answer

Create a YouTube video and then embed a link to that in an eBulletin to your target audience. You can personalise the message with their preferred name. You could also segment your audience and send customised messages to each segment, depending on their interests.

Total: 40 marks

Study unit 3: e-Extension case studies and COVID-19 experiences

Session 3.1: 1917 iTEAMS (Integrated Technology Enabled Agri-Management System), Meghalaya State, India

Activity 3.1 Individual activity

1. Create organic farming content for communication among farmers using mobile calling, SMS, recorded voice message, mobile phone recorded video (5 marks)

Session 3.2: Farm Radio International, Africa

Activity 3.2 Individual activity

1. Prepare a radio script for emphasising importance of Farmer Producer Organisations in agricultural development and ways to design a interactive radio programme. (5 marks)

OR

2. Listen to any radio programme related to agriculture and participate in any of the interactive programs (farmer and expert vox pops/ mini-dramas/ phone-ins/ community discussions and debates/ field interviews and quizzes) and state your experiences (5 marks).

Session 3.3 UPTAKE Project, Tanzania

Activity 3.3 Individual activity

1. Explore and use online open-source SMS gateways to reach farmers (3 marks)

Session 3.4. Knowledge Innovation Repository of Agriculture in the North-East (KIRAN) -SMS Gateway, India

Activity 3.4 Individual activity

1. List five websites/ web portals providing agricultural related information (2 marks)

Session 3.5. Khushaal Zamindar- A mobile agriculture service by Telenor Pakistan

Activity 3.5 Individual activity

1. Create a value-added mobile service plan for your farmers. (5 marks)

Session 3.6. Social Media- WhatsApp, Kerala, India

Activity 3.6 Individual activity

1. Create WhatsApp group to reach your clientele (farmers) (5 marks)

OR

2. Explain your experiences in participating professional WhatsApp groups? (5 marks)

Session 3.7. Social Media: YouTube, India

Activity 3.7 Individual activity

1. Create YouTube account for professional purpose (1 mark)

2. Record a 3 minute video related to agriculture (2 mark)

3. Edit and upload video (2 mark)

OR

4. Use YouTube Live to conduct a session with farmers for 30 min and use the online record option. (5 marks)

Session 3.8. Network for Information on Climate Exchange (NICE), India

Activity 3.8 Individual activity

1. Create content for any climate/ weather related awareness/ forecast information for farmers as SMS and also to post in WhatsApp, Twitter, Facebook (2.5 marks)

2. Create an account for posting a blog, and write a blog on climate/ weather related (post with minimum 250 words and two photographs). (2.5 marks)

Session 3.9: Online Surveys: ICT4RAS interest group of GFRAS-Global Survey on Social Media

Activity 3.9 Individual activity

1. Create online survey using Google Forms/ SurveyMonkey to assess the extension personnel's or farmers' e-extension tool preference. (5 marks)

Summative assessment: Unit 3

1. What are the e-extension tools used in the 1917iITEMS project? (5 marks)

Answer:

IVRS-Toll free number, Mobile calling, Online Knowledge management system, SMS, Vehicle response system

2. What are the solutions offered by the 1917iITEMS project to farmers? (5 marks)

Answer:

Agro-advisory, logistics and market solutions

3. List the lessons from the 1917iITEMS project. (5 marks)

Answer:

- Along with agri-advisory, integration of market linkage is crucial*
- Logistics support is essential for transporting farm produce*
- Entrepreneurs and agri-business firm's partnership is essential for ensuring better market price for farmers*

4. How can you make radio programmes interesting to the listeners? (5 marks)

Answer:

We can use innovative Radio programming formats such as farmer and expert vox pops, mini-dramas, phone-ins, community discussions and debates, field interviews and quizzes.

5. What are the e-Extension solutions offered by the KIRAN project to the farmers? (5 marks)

Answer:

- 1. Timely reminder/alerts regarding practices, relating to farmers specialisation and vocation.*
- 2. Synchronised farming advice on crops/animals.*
- 3. General information on opportunities and scopes in agriculture.*
- 4. Financial support information.*
- 5. Market information.*
- 6. Training schedule.*
- 7. General information on agriculture technologies.*

6. List the common features of YouTube (5 marks)

Answer:

Common features in YouTube are playlists, community posts, cards, and end screens

7. Indicate Do's and Don'ts when using google forms.

(10 marks)

Answer:

Some of the Do's and Don'ts when using Google Forms are;

- *Visualization of output before preparation of schedule is important*
- *Precise, clear and concise questions*
- *Choice of online data collection tools should be based on the type of questions to be posed*
- *Page breaks should be incorporated instead of long scrolling surveys (branching logic)*
- *Sequence of questions should be logical*
- *Mention tentative time required to take the survey*
- *Leading questions should be avoided*
- *If options are non-exhaustive, 'other' option should be incorporated*
- *Long questions need to be avoided*
- *Privacy protection measures need special attention*
- *Communication of survey results to respondents is necessary*

Total: 40 Marks

Study unit 4: Concluding thoughts

Session 4.1: Best-fit functions and conditions

Activity 4.1 Individual activity

1. Why is a single approach rarely effective?

(5 marks)

Answer

We are working with audiences with diverse needs and can have different ages, gender, education and experience. Therefore multiple methods are more likely to communicate effectively with the different segments.

Session 4.2: Steps for e-extension success

Activity 4.2 Individual activity

1. Describe some of the steps for e-extension success.

(15 marks)

Answer

- *A mindset looking to the future, to see what might be coming.*
- *Assessing new tools and technologies that appear in the marketplace.*
- *Keep experimenting with different tools and approaches.*
- *Need to practice with the new tools to become competent and confident.*
- *Join or create a community of practice to exchange ideas.*
- *Be brave and try new approaches.*

Summative assessment: Unit 4

Theoretical assessment

Answer the following questions in your own words.

1. Explain the importance of frequent practice and how to do that with e-extension (10 marks)

Answer

- *Learning takes time and repetitive, deliberate practice.*
- *To master a new e-extension tool, practice using it in a safe environment.*
- *For example, to master webinars, use the program for a short time each day and practice sharing a presentation, opening a poll, and responding to chat messages.*
- *You might initially do this on your own, and then seek some friends or colleagues who can join your practice meetings.*
- *As your competence and confidence increase, run a small webinar with some farmers.*
- *Do this every few days with different groups of farmers so you continue to improve your competence and confidence.*
- *Soon you'll be able to run larger and larger meetings with confidence.*

2. Describe why a community of practice can be useful when learning e-extension (10 marks)

Answer

- *Finding a group of like-minded professionals allows you to exchange ideas and keep improving your knowledge and skills.*
- *As new updates are released, there will be new things to learn.*
- *A support group like this helps you learn from your own experience and that of others too.*

Post-assessment

The post-assessment is to be done once you have read through the module and completed all the activities. Compare your answers to those in the pre-assessment to identify where

knowledge has been gained and where improvements can be made. Rate your knowledge on the topics on a scale of 1 to 5 by circling the corresponding number.

	Question	Self-assessment				
		Low		High		
1	How well can you describe what e-extension is and how it has evolved over time?	1	2	3	4	5
2	How confident are you to outline the purpose and major functions of e-extension in Agricultural Innovation Systems?	1	2	3	4	5
3	How well can you describe the advantages and disadvantages of e-extension?	1	2	3	4	5
4	How confident are you to choose the most appropriate type of e-extension tool for your situation?	1	2	3	4	5
5	How well can you compare and contrast the key asynchronous e-extension tools?	1	2	3	4	5
6	How able are you to describe several best practice case studies in e-extension?	1	2	3	4	5
7	How well can you outline the steps to success with e-extension in the real-world?	1	2	3	4	5
8	How confident are you to try a new extension tool that you haven't used before?	1	2	3	4	5

Learner's own answer

Global Forum for Rural Advisory Services (GFRAS) is about enhancing the performance of advisory services so that they can better serve farm families and rural producers, thus contributing to improved livelihoods in rural areas and the sustainable reduction of hunger and poverty. Rural advisory services help to empower farmers and better integrate them in systems of agricultural innovations.