Enhancing Digital Literacy and Cybersecurity Awareness in Eastern Bhutan

#ISIFAsia2024
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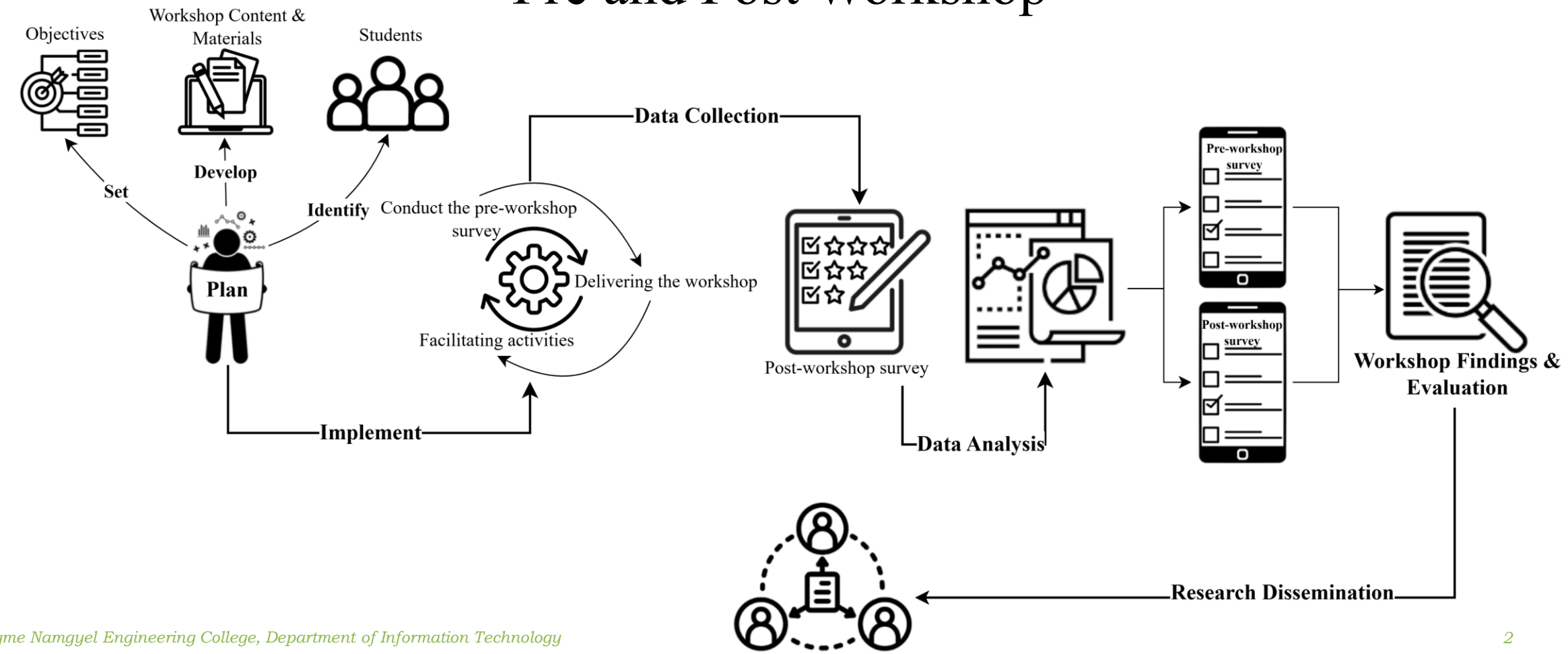
Research to Community Impact

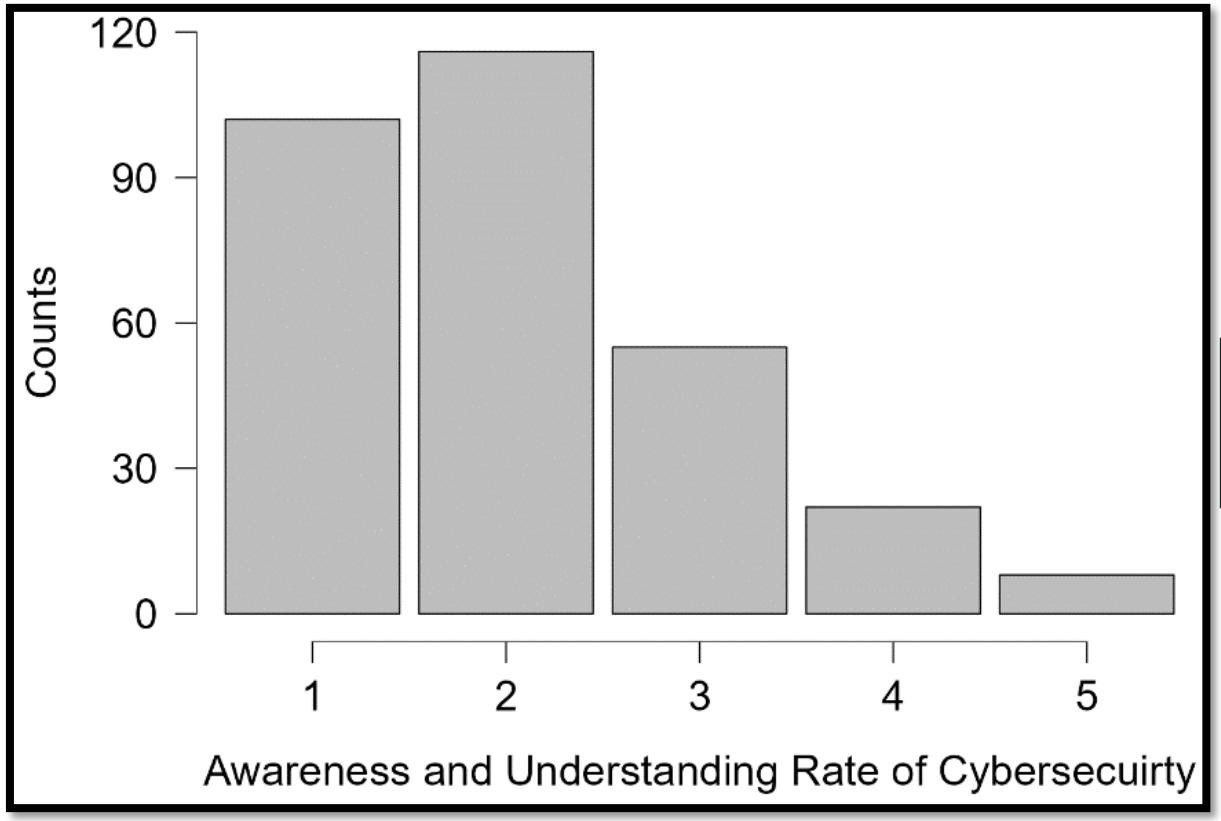
BACKGROUND

Action Research Title

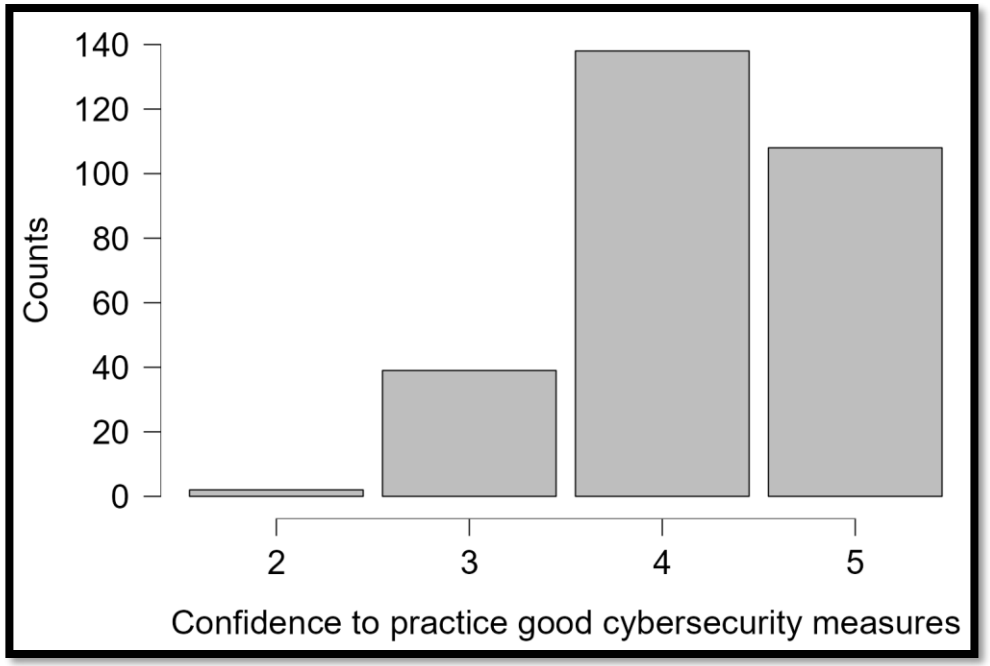
"Enhancing Understanding and Awareness of Cybersecurity Among First-Year Students of Technical Colleges in Bhutan: A Case Study of Pre and Post Workshop"

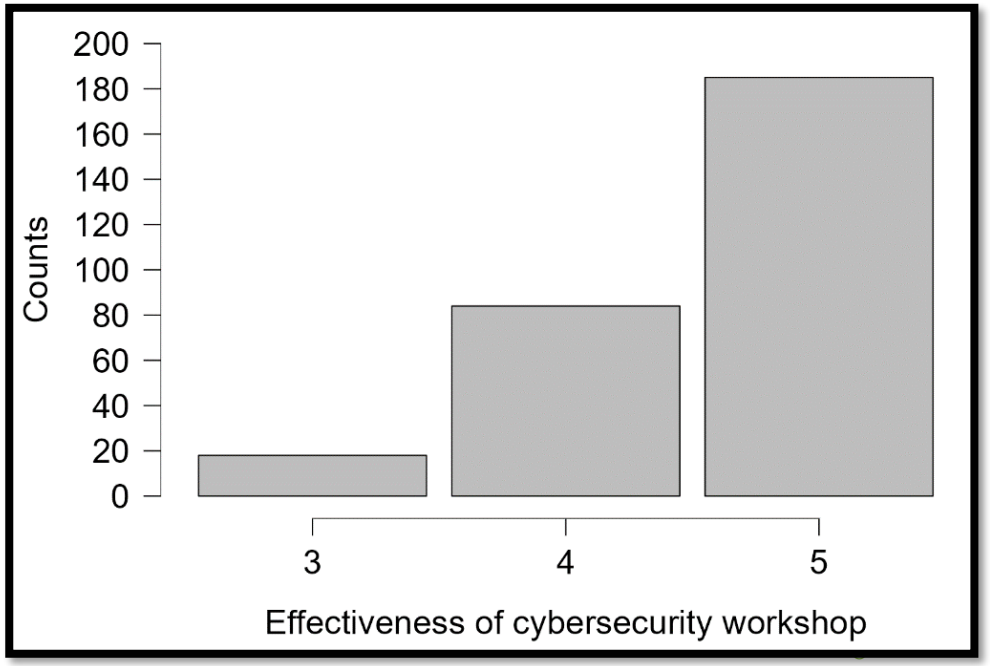


RESULT



Post Outcome





Enhancing Digital Literacy and Security Awareness in Eastern Bhutan

Funded by

APNIC FOUNDATION

Collaboration

In collaboration with JIGME NAMGYEL ENGINEERING COLLEGE

GovTech Bhutan

Project Goals

- Improved Digital Literacy
- Cybersecurity Awareness
- Empowered Individuals and Communities
- Strengthened Collaboration
- Enhanced Technical Capacity

Focus Area

Knowledge

Benefits

- Increased Participation in Digital Economy
- Reduced Cybersecurity Risk
- Enhanced Innovation & Collaboration

2024 ISIF Asia Application

APNIC FOUNDATION

Approve

Activity 1: Curriculum Development

JAD Approach

- Define Objectives
- Session Preparation
- Session Conduct
- Documentation

Trainer

Staff and Students

Professional Development

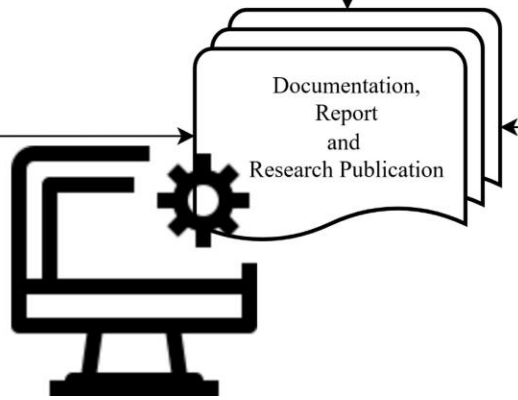
Activity 2: Technical Training Sessions

Main Activities

Activity 3: Digital Literacy Workshops

Activity 4: Awareness Campaigns

Activity 5: Knowledge Sharing Workshops

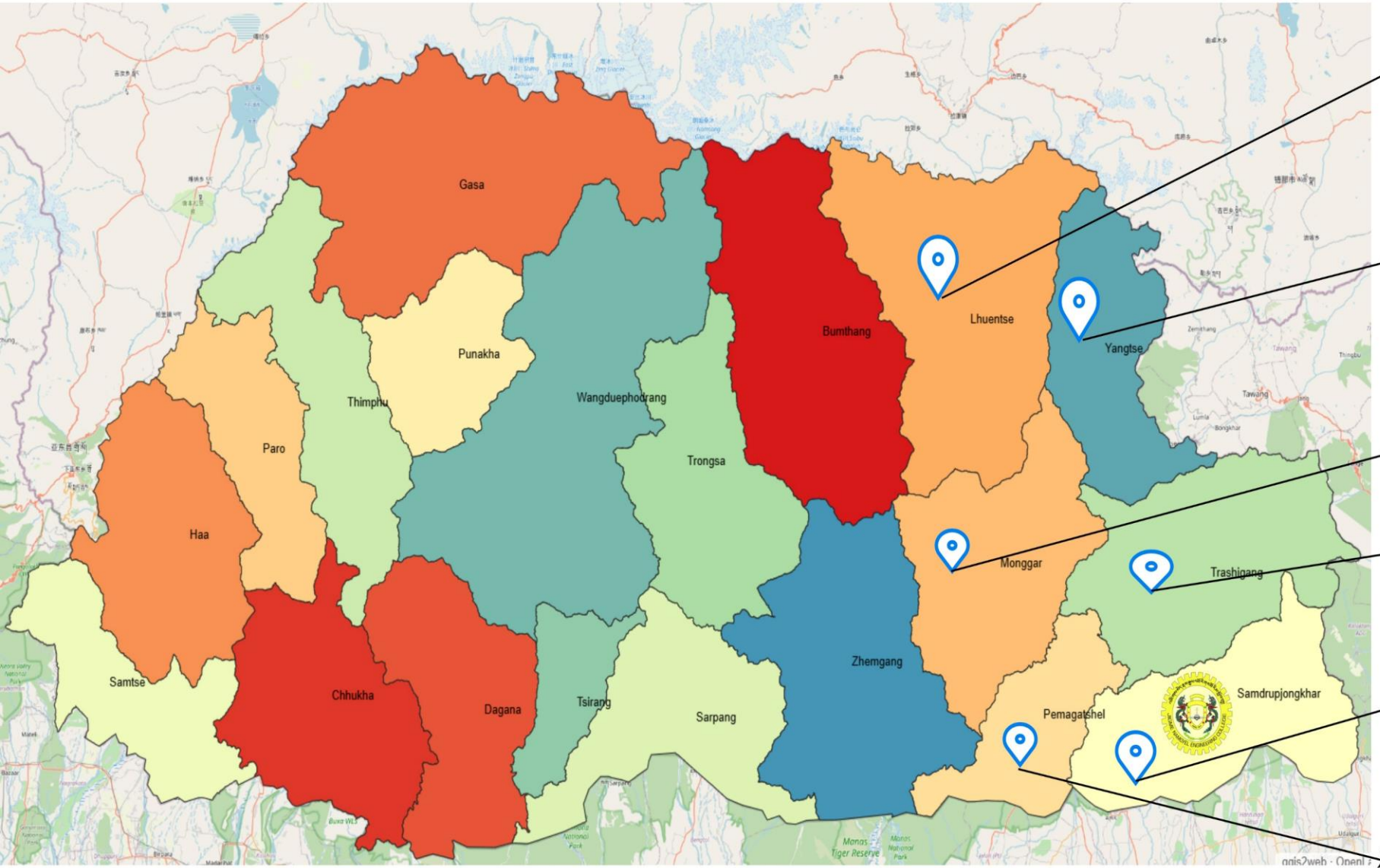


WHAT WE TEACH – TECHNICAL CONTENT

Safe Mobile Use	• App permissions • Identifying fake apps • Device locking
Phishing Awareness	• Real vs fake messages
Password Management	• Strong vs weak passwords • Live password creation
Social Media Safety	• Private vs public sharing • Avoiding personal data exposure
Two-Factor Authentication (2FA)	• Why 2FA matters • Enabling on key platforms
Cyberbullying & Reporting	• Definition and examples • How and where to report
Network Hygiene	• Avoiding open Wi-Fi • Securing hotspots

Google Drive Safety	• Share files securely • Use shared folders with permissions
Google Meet	• Host secure meetings • Control participants
Google Calendar	• Event creation and access management
Google Docs/Slides	• Collaboration features • Version tracking and comments
IPv6 Addressing	• Address format explanation • Real-world use case demos
Subnetting in IPv6	• Division and structure hands-on • Practical scenarios
Hands-on IPv6 Configuration	• Set IPv6 address manually • Validate using tools

Workshops and Training Target Areas



Lhuntse District
Approx. participants:170

Trashi Yangtse District
Approx. participants: 170

Mongar District
Approx. participants: 150

Trashigang District
Approx. participants: 140

Samdrup Jongkhar District
Approx. participants: 195

Pemagatshel District
Approx. participants:155

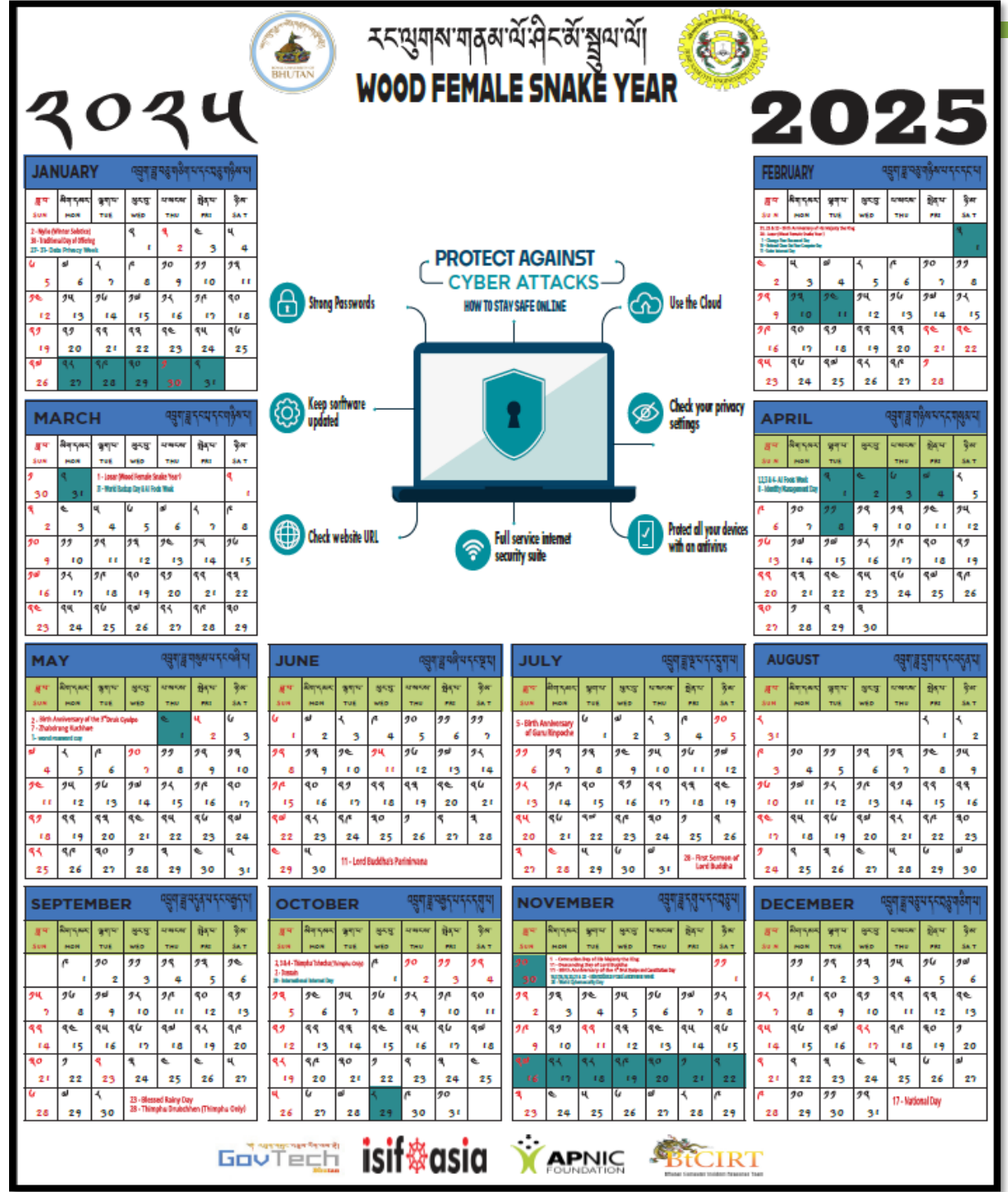
Training and Awareness Program – Participants Location

District	Location
Samdrup Jongkhar	Orong Central School
	Choki Gyatsho Institute
	Wangphu Gewog
Pemagatshel	Nangkor Central School
	Thonphu Goenpa
	Dechheling Gewog
Mongar	Mongar HSS
	Yakpogang Anim Dingrim Shedra
	Ngatshang Gewog
Trashigang	Jampeling HSS
	Kanglung Thorim Wongma Shedra
	Sakteng Gewog
Trashiyangtse	Bayling HSS
	Trashi Yangtse Dratsang
	Bumdeyling Gewog
Lhuntse	Lhuentse HSS
	Lhuentse Dratsang
	Gangzur Gewog

FIELD IMPLEMENTATION – HOW WE REACHED THEM

"Reaching the Community: Implementation on the Ground"

Geographic Coverage	• Six eastern dzongkhags
Community-Based Delivery	• Conducted sessions in schools, monasteries, gewog centers
Simplified Learning Materials	• Translated content to Dzongkha and Local Language • Used infographics
Multimedia Teaching Aids	• Used short videos, live demos, and printed posters
Local Champion Engagement	• Identified active participants for follow-up • Built sustainability



CYBER SECURITY AND DIGITAL LITERACY

GovTech Bhutan · BtCIRT · APNIC FOUNDATION

Keep Your Personal Details Private

! Never post or share your personal informations online.

Personal information includes your:

- Full name
- Phone number
- Bank Details
- Address
- CID No.

Practice Password Safety

! Never share your password with anyone else.

Your password should be:

- Easy to remember, but hard for others to guess
- Different for every account
- Changed regularly
- 12 + characters (a mix of letters, numbers, and special characters)

"A strong password can look like dOnTpO$t3v3ryTh!NG"

Beware of Identity Theft

! Criminals online may try to get your information so they can pretend to be you. This is your identity theft.

To stop this, remember to:

- Never share personal information with strangers
- Communicate only with people you trust
- Private info isn't public - keep it that way

"Strangers might also create a fake account or pretend to be you.
Remember to only accept friend or follow request from people you know".

SMART

S Stay **Safe**
Don't give out your personal information to people/ places you don't know.

M Don't **Meet Up**
Meeting someone you met online in person can be dangerous.

A File **Accepting**
Accepting messages from people you don't know can cause problems.

R Sources **Reliable?**
Check information before you believe it. Is the person or web-site telling the truth?

T Always **Tell**
Tell an adult if some-one or something makes you feel uncomfortable.

If a stranger has contacted you inappropriately, inform a trusted adult (such as parents or a teacher). If you feel as though you're in danger and need help, call the police on **113** or contact BtCIRT on **+ 975 02 322360**

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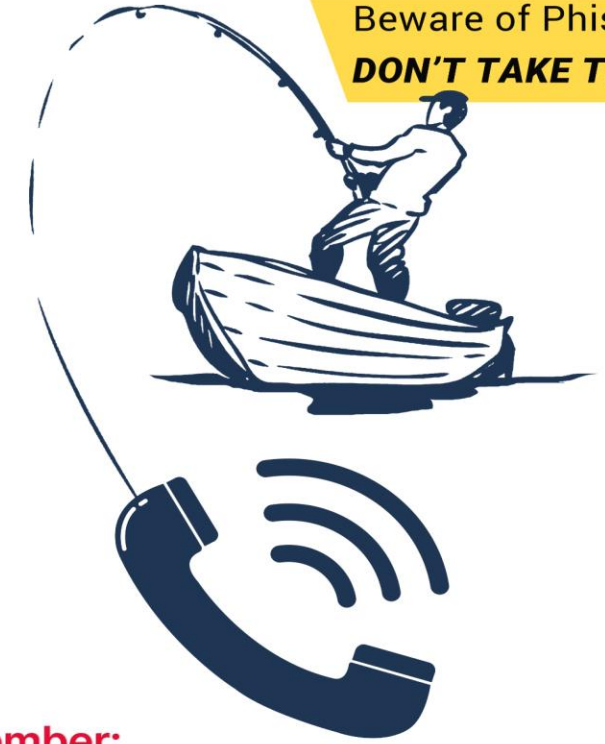
DON'T GET HOOKED

Beware of Phishing

DON'T TAKE THE BAIT!



Remember:

- *Be cautious of fake scenarios*
- *Always verify the senders*
- *Avoid suspicious email links and attachments*
- *Don't fall for urgency or the offers*

If a stranger has contacted you inappropriately, inform a trusted adult (such as parents or a teacher). If you feel as though you're in danger and need help, call the police on **113** or contact BtCIRT on **+ 975 02 322360**

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WATCH OUT FOR

VISHING

*YOUR DATA IS WORTH **GOLD** TO CRIMINALS*

Remember:

- *If in doubt, end the call*
- *Be wary of probabing questions*
- *Try not to share phone numbers, email ID and personal details.*
- *Never disclose your password or authentication codes to others*

If a stranger has contacted you inappropriately, inform a trusted adult (such as parents or a teacher). If you feel as though you're in danger and need help, call the police on **113** or contact BtCIRT on **+ 975 02 322360**

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CYBER SECURITY AND DIGITAL LITERACY

Security starts with you.

Be cautious of urgent calls and text messages

Phishing is real. Stay alert

Think before you click and verify the sender before opening the email

Be aware of strangers online

Choose strong password and change on a regular interval

Protect your devices with Antivirus

Check your privacy settings

Keep your information private

Check website URL

Go for the licensed software and avoid using pirated ones

Keep kids safe online - Talk openly. Set rules. Use filters. Stay aware

Be careful about what you post online

Shop safely using trusted shopping platforms

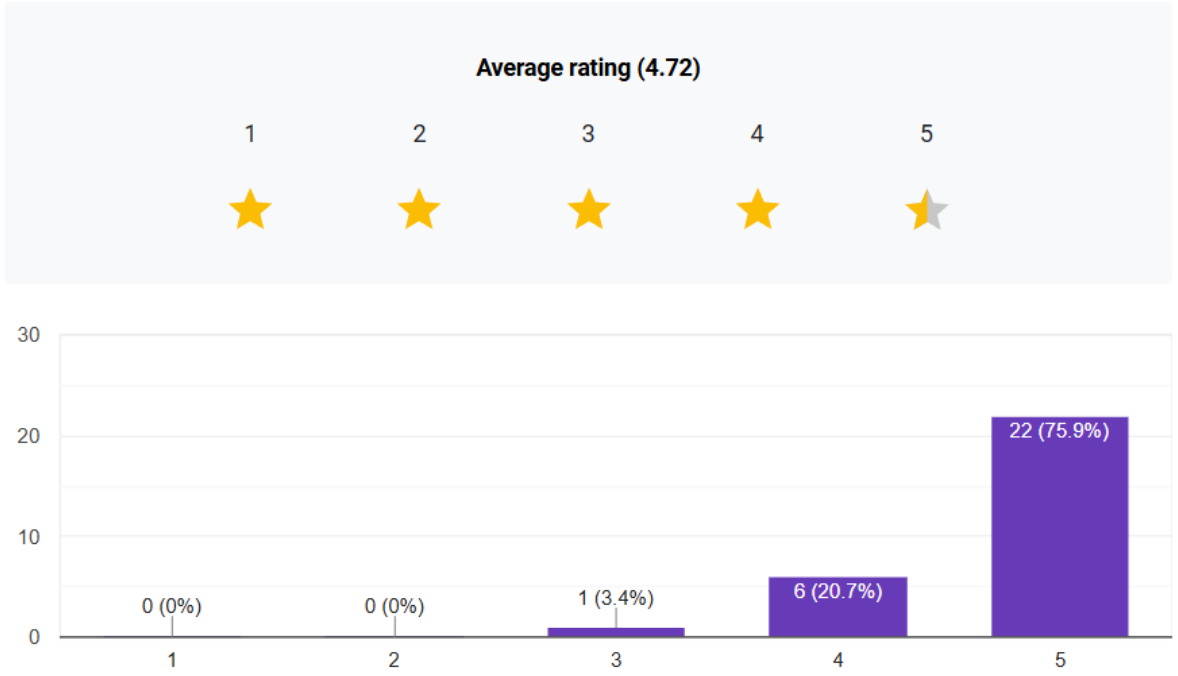
Remember to log off

Respect yourself and others online

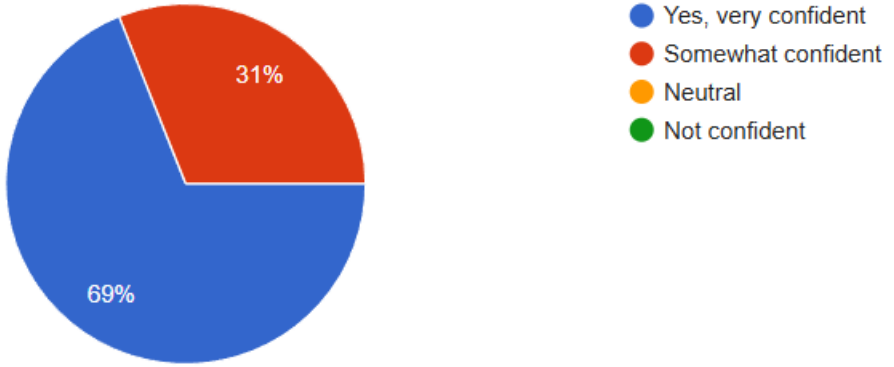
If a stranger has contacted you inappropriately, inform a trusted adult (such as parents or a teacher). If you feel as though you're in danger and need help, call the police on **113** or contact BtCIRT on **+ 975 02 322360**

ToT Impact

1. How would you rate the overall quality of the Training of Trainers (ToT) program?



4. Do you feel more confident delivering similar training to students and the public after attending this workshop?



7. Will you apply the practices and skills learned from this workshop in your daily work or community outreach?

https://dit.jnec.edu.bt/

DIT Facebook Page

DIT YouTube Link