Field Questionnaire

Assessment of IoT-Based Applications in Fisheries Sector under RMTP of PKSF

# Section A: General Information

1. Name of Farmer/Enterprise: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Location (District/Upazila/Village): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Type of Farm (Pond/Hatchery): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

If Type of Farm: Pond

4. Pond Size (decimal): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Major Products: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

else

4. Hatchery Size (Decimal): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Major Products: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. Production System:

🞎 Traditional 🞎 Semi-intensive 🞎 Intensive

7. Average Annual Fish Production (kg/ton): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. Access to ICT/Digital Tools: (Yes/No)

If yes then,

🞎 Smartphone 🞎 Basic phone

🞎 Internet access available 🞎 Internet access not available

else no

9. Did you hear about IoT technology are being used in Fisheries/Aquaculture? Yes/No

If yes, Do you use it? (Yes/No)

If no, why don’t you use it? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

else yes as proceed to Section B

else no

# Section B: IoT Device/Application Used

1. What type of IoT device/application was installed?

🞎 Water quality monitoring sensor (pH, DO, Temp, Ammonia, Salinity)

🞎 Smart feeder 🞎 Automatic aerator 🞎 Fish health/camera monitoring

🞎 GPS/Traceability system 🞎 Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Device Details (Brand/Model/Vendor): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Communication System Used:

🞎 GSM/4G 🞎 Wi-Fi 🞎 LoRa 🞎 Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Who (Vendor name) provided/installed the device? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Approximate Cost of Device (Tk.): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Section C: Usage & Functionality

1. How frequently do you use/check the IoT system?

🞎 Daily 🞎 Weekly 🞎 Occasionally

2. What type of data/alerts do you receive?

🞎 SMS alerts 🞎 Mobile app dashboard

🞎 Web platform 🞎 Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Was training/orientation provided for device usage?

🞎 Yes 🞎 No

If yes, by whom: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Section D: Technical & Economic Feasibility

1. Did the IoT system work reliably in your farm environment?

🞎 Always 🞎 Sometimes 🞎 Rarely

2. Technical issues faced: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Did the IoT system help improve:

🞎 Water quality management 🞎 Feed efficiency

🞎 Fish growth/health 🞎 Reduced mortality

4. Change in yield/production after IoT adoption (%): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Change in input costs after IoT adoption: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. Net economic benefit (Tk.): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Section E: User Acceptance & Experience

1. How easy was the IoT system to use?

🞎 Very easy 🞎 Manageable 🞎 Difficult

2. Are you willing to continue using IoT if project support ends?

🞎 Yes, I will invest myself 🞎 Yes, but only if supported 🞎 No, too costly/not useful

3. Suggestions for improvement: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Section F: Institutional & Service Support

1. Who provided after-sales/technical support?

🞎 Vendor 🞎 PO/MFI staff 🞎 None

2. Time duration to provide support (in years): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Was the support adequate?

🞎 Yes 🞎 No

3. Preferred service/payment model:

🞎 One-time purchase 🞎 Monthly subscription

🞎 Cooperative/group-based sharing 🞎 Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Section G: Broader Impact

1. Did IoT adoption improve market access (traceability, certification, QR code)?

🞎 Yes 🞎 No

2. Did IoT adoption increase consumer trust/sales?

🞎 Yes 🞎 No

3. Environmental/resource efficiency impact: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Section H: Case Story (Qualitative)

Please describe your personal experience with IoT technology:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Key challenges faced: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Key benefits observed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Quote/Testimonial: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_