

#### Appendix 4.2

### SMART AQUAFARM FEEDER AND MONITORING SYSTEM IN HIGHLY TURBID CONDITIONS

### ONSITE PROJECT UPDATE MEETING WITH ASEAN IVO SAqFeeder Team Partner Institutions

#### **Report/Minutes Form**

#### I. Organizer:

Name:	Engr. Eduardo D. Piedad Jr.
Position:	Project Leader
Institution:	DOST - ASTI

#### II. Program:

Date: June 24-25, 2025

Venue:

June 24, 2025:

**ASTI Training Room** (DOST – ASTI Bldg, UP Technology Park, C.P Garcia Avenue, Diliman, Quezon City)

#### June 25, 2025:

Morning Session - Electronics Product Development Center (DOST Main Building, General Santos Avenue, Brgy. Central Bicutan, Taguig, Metro Manila)

**Afternoon Session - Aquaculture Industry Expo** (World Trade Center, Pasay City, Metro Manila)

#### **Program Agenda:**

(Note: describe the final program here)

#### III. Participants:

#### 24 June 2025

No.	Name	Organization
1	Engr. Eduardo D. Piedad Jr.	DOST - ASTI
2	Dr. Franz A. de Leon	DOST - ASTI
3	Mr. Gerwin P. Guba	DOST - ASTI
4	Dr. Meryl Regine P. Algodon	DOST - ASTI
5	Vanesa O. Osiana	DOST - ASTI
6	Mr. Chan Vei Siang	UTM
7	Dr. Farhan Bin Mohamed	UTM



8	Engr. Ace Zander C. Antonio	TUPV
9	Engr. Gregorio Crisostomo	TUPV
10	Dr. Lim Tiong Hoo	UTB
11	Dr. Nurun Najeebah Az-Zahra binti Pg Dato Seri Setia H Tashim	UTB
12	Joanna G. Syjuco	DOST - ASTI
13	Michelle P. Neverida	DOST - ASTI
14	Nia Bernise F. Fabay	DOST - ASTI
15	John Kevin C. Abonita	DOST - ASTI
16	Elise C. Espares	DOST - ASTI
17	John Frederick M. Majan	DOST - ASTI
18	Kezia Celayne I. Bayona	DOST - ASTI
19	Jacob Seth Barcelona	DOST – ASTI
20	Eduard Angelo Roque	DOST – ASTI
21	Glenn Vincent C. Lopez	DOST - ASTI
22	Michael P. Cruz	DOST - ASTI
23	Bryle D. Galzote	DOST - ASTI

#### 25 June 2025

No	Name	Organization
1	Engr. Eduardo D. Piedad Jr.	DOST - ASTI
2	Dr. Meryl Regine P. Algodon	DOST - ASTI
3	Mr. Gerwin P. Guba	DOST - ASTI
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	Seri Setia H Tashim	
12	John Frederick M. Majan	DOST - ASTI
13	Kezia Celayne I. Bayona	DOST - ASTI
14	Jacob Seth Barcelona	DOST – ASTI
15	Eduard Angelo Roque	DOST – ASTI
16	Glenn Vincent C. Lopez	DOST - ASTI
17	Michael P. Cruz	DOST - ASTI
18	Krizzie Keith Benzon	DOST - ASTI
19	Jhonatan Tapay	DOST - ASTI



20	Bryle Galzote	DOST - ASTI
21	Roanne C. Nepunan	DOST-ASTI

#### IV. Summary of the activities corresponding to the objectives.

#### **Program Agenda:**

The onsite project update meeting for the ASEAN IVO SAqFeeder Team was held over two days, with the primary aim of presenting project progress, discussing technical and operational developments, and planning for future activities. It included institutional presentations, DOST – ASTI and EPDC Facilities Tour, system demonstrations, literature review updates, intern research sharing, budget discussions, field deployment coordination, planning for upcoming publications and events, and attending the aquaculture industry exhibit. The event concluded with a group photo session.

#### The *primary objectives* of the event were:

- To provide project updates on the ASEAN IVO SAqFeeder initiative from each participating institution.
- To align with the status of deliverables and adjust timelines where needed.
- To conduct a workshop focused on budget preparation, documentation requirements, and planning for upcoming field visits and activities.
- To share technological developments, particularly in AI and software, with DOST-ASTI interns.
- To begin early-stage discussions for a follow-up ASEAN IVO project proposal.
- To encourage inter-agency collaboration through knowledge sharing and networking.
- Strengthen collaboration among partner institutions for the SAqFeeder project.
- Introduce EPDC's capabilities and explore outsourcing opportunities.
- Facilitate knowledge exchange and identify resources to support project development.
- Initiate project planning and define next steps for the SAqFeeder initiative.

#### Day 1: Onsite Project Update Meeting on 24 June 2025

#### **Activities Corresponding to the Objectives:**

- Welcome Remarks and Institutional Overview: Presentations from DOST-ASTI, UTB, UTM, and TUPV highlighted their contributions and project implementation strategies.
- Short ASTI Facilities Tour: A brief guided tour of the DOST-ASTI facilities was conducted. Participants were introduced to the Institute's key research and



development infrastructure, including laboratories focused on embedded systems, AI model training, wireless sensor networks, and hardware prototyping. The tour offered participants a closer look at the technical environment and highlighted ASTI's broader contributions to national R&D initiatives.

- MATLAB Technical Session by TechSource: Covered rapid prototyping, embedded deployment, Python-MATLAB interoperability, and AI-based image processing, enabling teams to accelerate model implementation and deployment across embedded platforms.
- Closed-Door Planning Meeting: Internal team session focused on adjusting project timelines, deployment logistics, and deliverables tracking.
- Project Update Presentations: Each institution delivered technical briefings on prototype development status, data collection tools, motor/battery specs, and Al model integration.
- **Budget Review**: Participants reviewed current budget utilization (approx. 21%), pending requests, and projected usage (up to 51%); deadlines for procurement (Jan 2026) and liquidation (Mar 2026) were emphasized.
- Project Planning: Potential project extension up to 12 months (one-time only) was discussed. Coordination of farm visits and data collection in conjunction with the Philippine Shrimp Congress (Oct 8–10, Bacolod) was proposed. A culmination meeting in January 2026 (tentatively at UTB) was discussed.
- Publications and Dissemination: Commitment to produce at least three projectrelated publications; IEEE conference and journal submissions were recommended.
- **Stakeholder Engagement**: Plans to exhibit the project at national events and engage local aquaculture partners (e.g., farm MOAs) were advanced.
- Intern Research Highlights: Interns showcased models built using YOLO and CCA for object detection and feed monitoring, reflecting early-stage success in automated system intelligence.
- Workshop on Budgeting and Documentation: Emphasis on procurement timelines, submission formats, and aligning requests with approved budgetary scopes.
- Paper and Proposal Development: Preliminary sessions for collaborative publication drafting and brainstorming next-phase proposals under ASEAN IVO
- **Networking and Group Photo**: Provided an informal setting for relationship building and concluding documentation.

#### Changes in Work Plan, Schedule, and Budget Allocation

#### 1. Work Plan Adjustments:

- Data collection and deployment timelines were delayed but are now progressing.
- Each institution has adopted slightly different technical approaches tailored to available resources and environments.



#### 2. Schedule Changes:

- Culmination meeting moved to January 2026 (from initial year-end timeline).
- Additional onsite meetings or conference-aligned engagements were proposed.

#### 3. Budget Updates:

- Budget utilization is currently at 21% with pending requests totaling up to 51%.
- Project funds must be fully utilized by March 2026, with all purchases made by January 2026.
- Emphasis on submitting purchase and travel requests well before deadlines to ensure compliance and reimbursement.
- Institutions were encouraged to finalize procurement requests, prototype component acquisitions, and publication fees within the allowable period.

#### Day 2: Onsite Project Update Meeting on 25 June 2025

#### **Activities Corresponding to the Objectives:**

- Introduction of Participants: The event started with a warm welcome by Engr. Eduardo Piedad. Representatives from UTM, UTB, and TUPV introduced themselves and their institutions. EPDC team was introduced by Engr. Glenn Vincent Lopez, who also provided an overview of EPDC's mission and recent initiatives.
- **AVP Presentation:** Audio-visual presentation showcased EPDC's core functions, capabilities, and accomplishments.
- Introduction of EPDC Services: The EPDC team delivered a comprehensive overview of their service offerings, including electronic design, prototyping, testing, outsourcing, and fabrication support. Specific examples of collaborative projects and support mechanisms for R&D teams were shared.
- Open Forum and Q&A: Interactive session addressing queries about EPDC's outsourcing processes and project management, ensuring clarity and transparency.
- **Facility Tour:** Guided tour of EPDC's laboratories and equipment, demonstrating the center's technical infrastructure and ongoing projects.
- Project Planning Discussion: A targeted planning session focused on potential
  collaboration between the SAqFeeder team and EPDC. The discussion centered
  on outsourcing specific hardware components to EPDC, aligning timelines, and
  outlining key action points for integration. Deliverables and support
  requirements were mapped out for subsequent follow-up.
- Aquaculture Expo Visit: To complement the technical agenda, participants visited the Aquaculture Expo at the World Trade Center. The visit provided



exposure to aquaculture technologies and supplier solutions, enabling exploration of relevant procurement options to support SAqFeeder implementation and scaling.

#### V. Documentation



Figure 1. Tour on Research and Development Division led by Dr. Meryl Regine Algodon.



 $\textbf{Figure 2}. \ \textbf{Tour on the Ground receiving station in DOST-ASTI.}$ 





Figure 3. Photo session after ASTI Facilities Tour



Figure 4. Closed door meeting with partner institutions on 24 June 2025.





Figure 5. MATLAB Demo from Techsource Systems and Ascendas Systems Group.



Figure 6. Photo op for the Culmination of Day 1.





**Figure 7.** Introduction of the Participants and EPDC Team led by Engr. Glenn Vincent Lopez.



Figure 8. EPDC Facilities Tour led by Engr. Krizzie Keith Marie Benzon.





 $\textbf{Figure 9.} \ \textbf{Photo session with ASEAN IVO SAqFeeder Team and EPDC}.$ 



**Figure 10.** ASEAN IVO SAqFeeder Team in World Trade Center, Pasay City to attend Aquaculture Industry Expo.