Training protocol for I-Fish data collection staff

(Version I, June 2015)

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This document can be downloaded from the I-Fish website with the following link:

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Purpose of this protocol

A data collection system for small-scale fisheries has been established in various sites across Indonesia. The collected data is uploaded and stored in the I-Fish database system. There are four types of data collection sites, differing in target species and gear type. Currently, the majority of the sites are focused on yellowfin tuna, *Thunnus albacares*, skipjack, *Katsuwonus pelamis*, bigeye tuna, *Thunnus Matabesar*, and albacore, *Thunnus alalunga*, all caught using handline gear. Pole and line gear is used to target skipjack and smaller yellowfin tuna. Blue swimming crab, *Portunus pelagicus*, and mud crab, *Scylla serrata*, are caught using traps and pots. The data collection activities would be a burden on the fishermen. Instead sustainability facilitators are trained and deployed in the field to collect the data. To ensure the data is collected accurately and is scientifically useful, data collection forms have been developed, tailored for gears and target species (see relevant protocols, link, or resource at the end). Sustainability facilitators require training and support in the use of these forms. The purpose of this protocol is to assist in the training of new field staff for deployment in I-Fish data collection sites across Indonesia. This protocol includes a description of the Sustainability Monitoring Team, mandatory and additional training with advised training refreshments, training content and suggested training schedule, equipment required in the field, job descriptions and requirements, expected reporting activities and performance indicators, a list of resources, training evaluation sheets and presentation slides.

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Section 1. The Sustainability Monitoring Team

A 'Sustainability Monitoring Team' is deployed in each site to collect data on the fishing activities. This team works in close collaboration with the fishermen and suppliers in a site. The size of the team will depend on the expected volume of data to be collected at each site. The Sustainability Monitoring Team will be responsible for ensuring that data collection activities within Indonesia are maintained at a high level and that monthly updates reporting on these activities are produced. The Sustainability Monitoring Team could consist of a Site Supervisor, an Assistant Site Supervisor and one (or more) Sustainability Facilitators. A hierarchical reporting system exists between the members of the Sustainability Monitoring Team (Figure 1, three systems depending on the staff required).

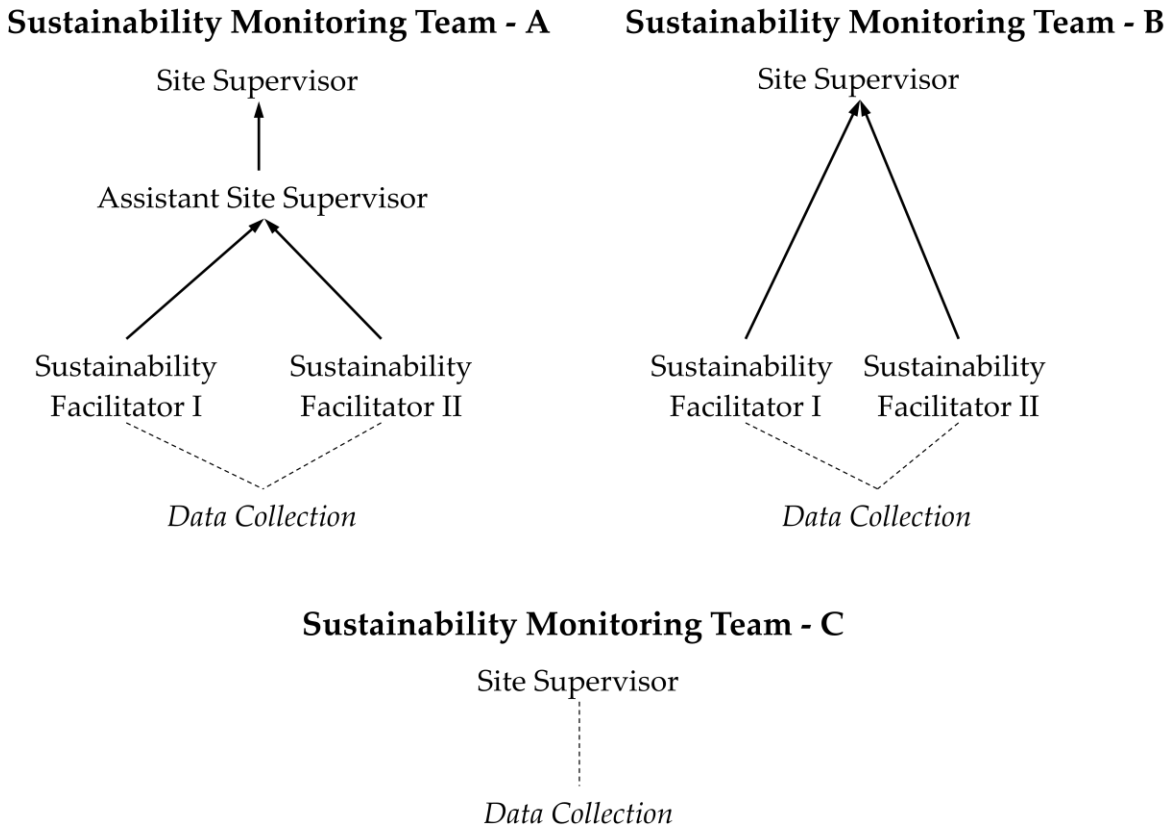

Figure 1. Three possible hierarchical reporting systems for the Sustainability Monitoring Team.

The Site Supervisor is the main person in charge of data collection activities, supported by the Assistant Site Supervisor in larger sites. Data quality control will be ensured by the Site Supervisor, by following the details outlined in the relevant data collection protocols. The Site Supervisor will ensure two Sustainability Facilitators are present at the landing area for each

unloading event. The Sustainability Facilitators collect the data directly from the fishermen. Each team member has the following duties and roles:

Site Supervisor:

- Lead and manage a small team in the field
- Ensure all data collection activity is performed correctly according to the relevant data collection protocol
- Verify all data before it is uploaded into I-Fish
- Upload all data into I-Fish (Further details on uploading to I-Fish can be found in the data collection protocols)
- Establish and maintain good relationships with stakeholders at the site, i.e. suppliers, processors, fishermen, port authorities
- Report all problems to the line manager

Assistant site supervisor:

- Support the site supervisor in managing the field team
- Ensure all data collection activity is performed correctly according to the relevant data collection protocol
- Maintain good relationships with stakeholders at the site, i.e. suppliers, processors, fishermen, port authorities
- Report all problems to the Site Supervisor

Sustainability facilitator:

- Conduct high quality data collection activities
- Report any problems to the (assistant) site supervisor
- Report all problems to the Assistant Site Supervisor (in cases where there is no Assistant, report directly to the Site Supervisor)

The Sustainability Monitoring Team is responsible for ensuring a high level of hygiene and quality is maintained in the transit area. This is done by monitoring the following (for more detail please consult Resource 24 and 24a, available for download on the I-Fish website):

- Temperature of fish (routine checks)

- Disinfectant usage (including random checks on concentration levels)
- Grading observation (process adequate? sensory testing to detect decomposition)
- Attention given to the overall cleanliness of the transit area, pick-up trucks, staff, staff uniforms, highlighting any possible areas of contamination.

Section 2. Mandatory and additional training, advised training refreshment

Each new team member will receive mandatory training before being deployed (Table 2). The training received will vary depending on the intended position of the new staff. The purpose of the training is to provide members of the Sustainability Monitoring Team with the knowledge and skills to conduct efficient data collection in the field. The training will be conducted at a facility that is convenient both for new staff and for the training team. Staffs who have not attended the mandatory training will not be allowed to travel to the field. The training should be refreshed at regular intervals to ensure the Sustainability Monitoring Team has the most up-to-date information and training for data collection in the field.

Table 1. Overview of the mandatory training, and suggested training refreshment for each position of the Sustainability Monitoring Team

Position	**Mandatory Training**	**Additional Training**	**Refreshment**
Site Supervisor	Training modules 1-8 (see next section	General organisation, leader and management skills specific to the company / situations	Every year
Assistant Site Supervisor	Training modules 1-8 (see next section	General organisation and management skills	Every year
Sustainability Facilitator	Training modules 1-8 (see next section		Every year

Section 3. Training contents and suggested training schedule

Each member of the Sustainability Monitoring Team will be given basic introductory training. Training will be both in-class and practice at a landing site. The following topics will be covered:

1. What is Sustainability?
   - Introduction to the theory and background of sustainability;
   - Issues on tuna fishery
   - The reasoning behind eco-labeling (market based initiatives) for the future of fisheries;
   - Tuna Fishing (Rumpon, depth description, possibility to conduct selective fishery)
2. Introduction to target species;
   a. Introduction to general fish identification
      Introduction to main species: yellowfin, skipjack and bigeye tuna
      Introduction to most common bycatch species
   b. Introduction to Mud crab
   c. Introduction to Blue swimming crab
3. Introduction to ETP and Bait
   - Introduction to Endangered, Threatened and Protected species
   - Introduction to bait species
4. What is data collection?
   - Why collect data?
   - Collect data for whom? Introduction to WCPFC
   - Introduction to log-book and port sampling forms
5. Data entry
   - What is I-Fish
   - Input of data collected in forms UL1, UL02 and GMP01 into excel form EX01
   - Checking and verifying data before upload
   - Process of uploading to I-Fish
6. Data collection in the field
   - Supplier description, site conditions and background
   - The flow of fish: Rumpon → Vessel → Transit area → Plant/ Local Market
   - Using callipers and measuring board

- How to subsample
- Completing data collection forms

7. Introduction to Fair Trade
    - Fair Trade Standard
    - Fisher Associations
    - Premium Fund

8. Introduction to quality control
- Landing site hygiene
- Sensory testing (decomposition etc.)
- Product use: disinfectant product
- Transit area
- Plant

9. Fishery Improvement Programs
    - What is a FIP
    - Why work with a FIP
    - FIP progress in Indonesia

The training of new staff should be conducted over four or five days, depending on the size of the group. A suggested training schedule is presented below, where training starts at 13.30 on the first day, allowing participants to travel to the venue in the morning. At the end of each day, a recap and overview of the next day's training is advised. At the start of each day, it is advised to have an ice-breaker, a mini quiz and a summary from the previous day. Presentation slides can be found in the Annex and can be accessed through the I-Fish website (link to be added later).

Table 2. Suggested training schedule for new staff.

Time	Activity	Description	Training presentation
Day 1			
13.30 – 13.45	Welcome Remark	- Introduction - Training purpose & expected goal - Individual introductions	
13.45 – 14.00	Introduction to organisation	- History of organisation and mission and vision	
14.00 – 16.00	Intro to Sustainability	- Program Background	*Presentation 1, 2, 3 and*

	Program	- Species ID - Data Collection forms - Endangered, threatened and protected species	*4* (Note, only use the presentation 3 that is relevant to your site, i.e. mud crab presentation for mud crab sites, etc.)
16.00 – 16.15	Coffee Break & Prayer		
16.15 – 17.30	Intro to Sustainability Program (Cont'd)	- I-Fish - Monthly Summary forms	*Presentation 5*
Day 2			
8.30 – 8.45	Summary & Quiz		
8.45– 10.30	Intro to Sustainability Program (Cont'd)	- Theory and background to sustainability - Intro to data collection Fish identification, target species, by catch species and data collection in the field - ETP species and bait species data collection in the field - Eco-labeling	*Presentation 1, 2, 3 and 4*
10.30 – 10.45	Coffee Break		
10.45 – 12.00	Intro to I-Fish	- Data entry and relations to all projects	*Presentation 6*
12.00 – 12.30	Summary & Closing Remarks		
12.30 – 13.30	Lunch & Prayer		
13.30 – 16.00	Admin & Reporting	- Introduction to organisation admin and reporting requirements	
15.00 – 16.00	Intro to Fair Trade	- Program Background - Fishermen Association - Fair Trade Committee - General Assembly - Premium Fund	*Presentation 7*
16.00 – 16.15	Coffee Break & Prayer		
16.15 – 17.15	Intro to Fair Trade (Cont'd)	-	*Presentation 7*
17.15 – 17.30	Summary & Directions for tomorrow's training		
Day 3			
8.30 – 8.45	Summary and Quiz		
8.45 – 11.15	Intro to Fair Trade (Cont'd)	-	*Presentation 7*
11.15 – 11.30	Coffee break		
11.30 – 12.30	Introduction to	- Landing site hygiene and	*Presentation 8*

	Quality Control	quality control	
12.30 – 13.30	Lunch & Prayer		
13.30 – 16.00	Intro to Fisheries Improvement Programs	- Regulations , compliance & relations to all programs	*Presentation 9*
16.00 – 16.15	Coffee break & Prayer		
16.15 – 17.15	Intro to Fisheries Improvement Programs (Cont'd)		
17.15 – 17.30	Summary & Directions for tomorrow's training		
Day 4 - Field trip			
Morning	Trip to processing plant	- Staff get tour of a processing plant, can see the different stages from when the tuna arrives in the plant in raw format to when it leaves, frozen	
Afternoon	Trip to landing site / fish market	- Staff get to experience the data collection process at a landing site. Two species of fish are used for training, one yellowfin and one skipjack. Each staff has experience recording the length and weight of each specimen, identifying to species level, filling in data collection form.	
17.15 – 17.30	Summary & Directions for tomorrow's training		
Day 5			
8.30 – 9.00	Summary and Quiz		
9.00– 10.30	Basic Data Analysis	- Introduction to basic data analysis, graphs, pie charts, etc	
10.30– 10.45	Coffee break		
10.45– 12.30	Training exercise	- Mini test from the week's presentations - Species identification	
12.30– 13.00	Training evaluation form	- Participants complete training evaluation form	*Training evaluation form*
13.00–	Closing Remarks and lunch		

After the final session on the last day the participants will be asked to complete a Training Evaluation Sheet (Annex), giving new staff the opportunity to provide feedback on the training. Feedback from this can be incorporated into future training activities. Previous feedback that has been included in the training program include:

- Make sure simple terms are used and explain less familiar words/abbreviations
- Have time for individual introductions from the group
- The Fair Trade concept can be difficult to understand first time, allocate more time for explanations and discussions

Upon training completion each staff will be given a Training Certificate. After completing the training the new staff should be capable of the following tasks:

- Distinguish between juvenile yellowfin and bigeye tuna
- Be confident in the use of callipers and measuring board
- Capable of recording the required data and of uploading the data to I-Fish
- Understand the purpose of the data collection activity
- Understand all reporting duties
- Be confident in giving brief explanations of Fair Trade, sustainability and Fishery Improvement Programs to fishermen and suppliers

Section 4. Job descriptions and requirements

Each position within the Sustainability Monitoring Team will have different requirements (qualifications) and job duties (Table 3).

Table 3. Description of requirements / qualification and job duties for each position.

Position	Position descriptions	Requirements / Qualifications
Site Supervisor	• Use this protocol and relevant data collection protocol to ensure the data collection activity is conducted to the standards and requirements outlined • Coordinate between suppliers and vendors related to the data collection process and to report on same back to the relevant managerial agency • Coordinate with all other relevant stakeholders: Government etc. • Support Quality Control implementation in the field and in the relevant plant according to the protocol • Support Corporate Social Responsibility activities; supporting initial scoping, project proposals, implementation and reporting on these • Report to relevant managerial agency on progress of the data collection activities in relevant port/ landing site	• Education – Bachelor of Science, BSc, or better • Experience in field activities / lab work • Ability to lead a small team • Ability to communicate effectively with varied stakeholders including: transit staff, fishermen, captains, government officials, co-workers and local villagers • Fulfill all requirements of "sustainability facilitator" below
Assistant Site	• Use this protocol and relevant data collection protocol to ensure the data collection activity is conducted to the	• Education – Bachelor of Science, BSc, or better

Supervisor	standards and requirements outlined • Coordinate between suppliers and vendors related to the data collection process and to report on same back to relevant managerial agency • Support Quality Control implementation in the field and in the relevant plant according to the protocol • Support Corporate Social Responsibility activities; supporting initial scoping, project proposals, implementation and reporting on these • Report to relevant managerial agency on progress of the data collection activities in relevant port/ landing site • Support the Site Supervisor to ensure efficient data collection activity at the site	• Experience in field activities / lab work • Ability to communicate effectively with varied stakeholders including: transit staff, fishermen, captains, government officials, co-workers and local villagers • Fulfill all requirements of "sustainability facilitator" below
Sustainability Facilitator	• Conduct data collection activities as outlined in this protocol • Conduct data input • Socialize future logbooks to vessel captains • Support the quality control activities in the landing area and in any relevant plants to which data collection activities are related. • Report to site supervisor	• Education – at least junior high school graduate • Attend one week training course on Quality and Sustainability in Tuna Fisheries • Adequate level of computer literacy: Minimum Microsoft Word and Microsoft Excel

Section 5. Reporting activities and performance indicators

Each staff is required to report on the activities in the field. This will be in the form of regular weekly work reports or reports detailing specific meetings and events. The reporting requirements will vary slightly with each staff member, see details below.

3.1 Reporting activities

Site Supervisors and Assistant Site Supervisors will submit the following reports:

- Weekly work reports to the line manager/supervisor each Saturday
- Monthly time sheet
- Sampling report
- Report operational funds per site
- Activity reports / minutes of workshops, stakeholder meetings, etc.
- Administrative reports (trip request, time off request, travel expenses, etc)

Sustainability Facilitators will submit the following reports:

- Weekly work reports to the line manager/supervisor each Saturday
- Monthly time sheet
- Sampling report
- Activity reports / minutes of workshops, stakeholder meetings, etc.
- Administrative reports (trip request, time off request, travel expenses, etc)

3.2 Key performance indicators

All members of the Sustainability Monitoring Team will be assessed on the following indicators:

- accountability and accuracy of work performed
- good and proper reporting and archived with near hard copy and/or soft copy on computer, google drive/dropbox

Section 6. Safety in the field

The safety of the Sustainability Monitoring Team when located in the field is an important consideration. Suspicious or questionable activity should be reported to the site supervisor immediately. The site supervisor should then report it to their line manager, who decides the next step, depending on the severity of the incident. All sites should have basic first aid kit available. Procedures should be established for reporting any incidents that occur in a systematic and timely manner. Field staff should keep a notebook record of any incidents that occur, noting:

- Who
- What
- How
- Where
- When
- Why
- How many times

The following guidelines are suggested for field staff:

- Immediately report any unsafe conditions, hazardous conditions and injuries to site supervisor
- Report all cuts and other wounds
- Keep the data collection area as tidy and obstacle-free as possible
- Follow instructions for lifting heavy objects
- Test equipment before use and report all malfunctions
- Immediately report the loss of an item to the site supervisor
- Refrain from smoking in the data collection area
- Wear appropriate clothing for data collection activities
- National labour laws should be adhered to (http://hukum.unsrat.ac.id/uu/uu_13_03.htm)

Section 7. Equipment required in the field

The Sustainability Monitoring Team will be provided with equipment to help with the data collection process. These equipments should be available to the team at all times and the Sustainability Monitoring Team is responsible for the maintenance and security of these items at all times. It is suggested that the field staff are provided with extra credit for their mobile phones, as communication with multiple stakeholders will be an important component of their work.

The following pieces of equipment should be available:

- Calipers
- Measuring board
- Laptop
- Weighing scales
- Camera
- Printer
- Waterproof, steel-toed boots
- Gloves
- Compact paper clipboard and pen
- Disposable Mask
- Stationary
- Calculator
- Distinguishable T-Shirt
- Voice recorder
- Modem for uploading data to database

Section 8. Resources

The following is a list of useful resources, which will be essential for the successful implementation of the Data Collection Protocol. These resources will be used by the Sustainability Monitoring Team in the daily implementation of their work. These resources can be downloaded from the I-Fish website (link to be included).

1. **Data collection protocol for small-scale handline tuna fisheries of Indonesia.** MDPI data collection protocol with multiple standard operating procedures for site activities and details of data uploading to I-Fish.

2. **Data collection protocol for the Indonesian blue swimming crab fishery, *Portunus pelagicus*.** MDPI data collection protocol with multiple standard operating procedures for site activities and details of data uploading to I-Fish.

3. **Data collection protocol for small-scale pole and line fisheries of Indonesia.** MDPI data collection protocol with multiple standard operating procedures for site activities and details of data uploading to I-Fish.

4. **Data collection protocol for the Indonesian mud crab fishery, *Scylla serrata*.** MDPI data collection protocol with multiple standard operating procedures for site activities and details of data uploading to I-Fish.

5. **Buku Penuntun untuk identifikasi Madidihang dan Matabaser dalam keadaan segar, tetapi konsidisi kurang ideal.** Fukofuka and Itano, 2007.

6. **Buku panduan untuk identifikasi ikan Madidhang dan tuna Matabesar dalam keadaan segar.** Itano, 2004.

7. **Suatu panduan untuk identifikasi ikan Madidihang dan tuna Matabesar dalam kondisi dibekukan air galam.** Merta, Itano and Proctor.

8. **ANOVA: A guide to Tunas (and tuna-like species) found in Indonesian Waters.** This is a short descriptive reference booklet which gives a description of each of the most common tuna and tuna like species in Indonesian waters. The differences between juvenile BET and juvenile YFT are highlighted

9. **Photographic identification guide for billfish, sharks, rays, tuna-like and non-tuna finfish taken in WCPO pelagic longline fisheries (v1)** McAuliffe et al, 2007. This book was produced to aid in the identification of non-target species in the longline fishery but covers all the most common non-target catch experienced in handline fishery.

10. **Fish and Fishery Products Hazards and control guidance, Fourth Edition-April 2011**. Department of Health and Human Services, Food and Drug Administration, Centre for Food Safety and Applied Nutrition, Office of Food Safety. This is a guide with reference to all food related quality and hygiene standards.

11. **Peraturan Menteri Kelautan Dan Perikanan Republik Indonesia Nomor Per. 18/MEN/2010 Tentang. Log Book Penangkapan ikan** dengan Rahmat Tuhan Yang Maha Esa Menteri Kelautan Dan Perikanan Republik Indonesia. This can be found at the end of the Ministerial Regulation and gives details about requirements and regulations related to Logbook usage in the Republic of Indonesia.

12. **MDPI Protocol for Continuous Port-Based Surveys.** Interaction between handline tuna fisheries and Endangered, Threatened and Protected species.

13. **Economically important sharks and rays of Indonesia.** White, Last, Stevens, Yearsley, Fahmi and Dharmadi, 2006. Simultaneously available in both English and Indonesian throughout the book, it describes the sharks and rays found in Indonesian waters.

14. **Market fishes of Indonesia.** White, Last, Dharmadi, Faizah, Chodrijah, Prisantoso, Pogonoski, Puckeridge and Blaber, 2013. Provides brief descriptions of the many fishes found in Indonesian markets.

15. **Billfish identification in Indian Ocean, pelagic fisheries.** IOTC, 2012. This is a brief presentation about how to identify the various billfish species.

16. **Identification of tuna and tuna-like species in Indian ocean fisheries.** IOTC, 2013. This is a brief presentation about how to distinguish between the various tuna and tuna-like species.

17. **Mengidentifikasi jenis-jenis ikan tuna di lapangan.** Merta.

18. **Offshore identification cards for small-scale fishermen.** Secretariat of the Pacific Community, 2013. Simple identification cards highlighting the most important features of each species.

19. **Identification sheet for important shark species in Indonesia, A – oceanic species.**

20. **Identification sheet for important shark species in Indonesia, B – large species.**

21. **Identification sheet for important shark species in Indonesia, C – deepwater species.**

22. **Tuna identification guide.**

23. **Turtle identification guide.**

24. **Fish quality guide. Methods for handling fish.** Outlining best practices to ensure and maintain fish quality during and after landing. Also available in poster format **(24a)**.

25. **Pedoman teknis Pengelolaan konservasi penyu.**

Annex. Training evaluation form and presentations

EVALUASI TRAINING

Tanggal :
Aktuvitas Training :
Pertanyaan table

1. Cukup :
2. Baik :

Masukan untuk topic-topik dibawah ini:

1. **Apa yang kurang dari training ini ?**
2. **Apakah ada komentar atau poin yang seharusnya dimasukan dalam training ini, tapi tidak disampaikan pada training ini ?**
3. **Apa yang anda rasa paling menarik dalam training ini?**
4. **Tolong berikan saran atau masukan sebagai informasi tambahan tentang apa yang anda harapkan dari training ini?**
5. **Bagaimana saran anda agar kedepannya training ini dapat berjalan lebih efektif dan menarik?**

		Nilai				
		1 (sangat kurang)	**2** (kurang)	**3** (cukup)	**4** (baik)	**5** (sangat baik)
1	Topik yang disampaikan					
2	Kecocokan topic dengan situasi yang dirasakan dilapangan					
3	Kualitas dari trainer					
4	Kualitas dari materi training:					
	a. Presentasi-presentasi					
	b. Materi Pendukung					
	c. Bahasa/interpreter					
	d. Jadwal					
	e. Tempat dan fasilitas acara					
	f. Makanan					
	g. Panitia					