Name...

Date....................................Place...

Essential EAFM

(Ecosystem Approach to Fisheries Management)

TRAINER RESOURCE GUIDE

Version 1

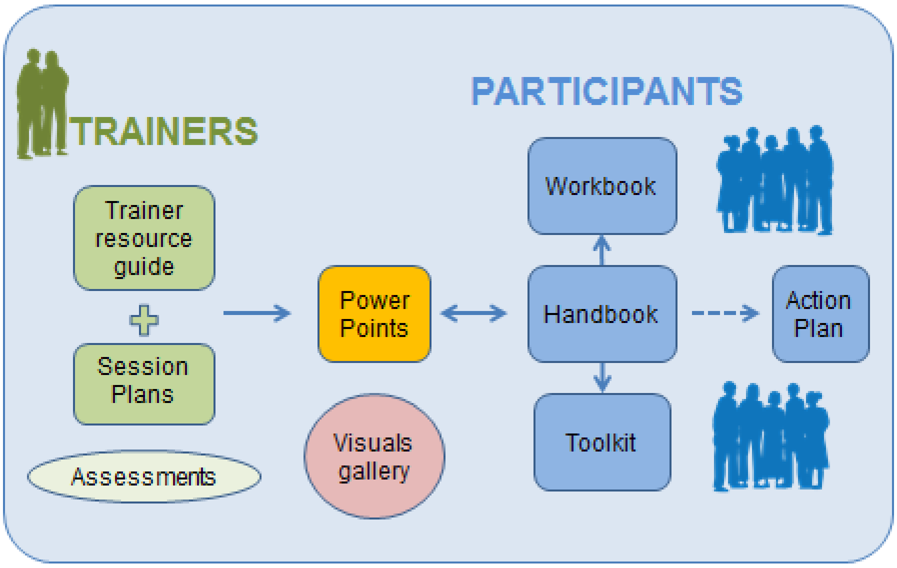
Contents

1. Introduction for trainers

1.1 Navigating the Essential EAFM training package

The course package consists of the nine main elements, plus additional resources. Figure 1.1 below shows which of the elements are for participants, which are for trainers only, and those that are shared. This visual can be found on the back cover of all documents.

Figure 1.1 Navigating the Essential EAFM training package



The nine main course elements include:

- Participant Handbook (Introduction, 17 modules and recommended reading)
- Participant Workbook
- Toolkit
- PowerPoints (17 presentations)
- Session Plans (SP) for each session explaining in detail how to deliver the session
- Action Plan Booklet
- Trainer Resource Guide
- A2 Visuals Gallery (key elements for wall display)
- Assessment Folder

NB. The course timetable and detailed session objectives are included in the Handbook introduction as well as in this guide (section 1.5).

Additional resources include:

- Additional trainer resource folder
- Slideshow (for breaks)
- 1-page Essential EAFM in a nutshell (see Handbook introduction)
- Websites and resources (listed as resources in Participant Handbook)
- Participating partner websites

1.2 Aim of course

This Essential EAFM training course is designed to develop capacity on how to apply EAFM for fishery and environment agency staff, as well as related economic development and planning staff, who are responsible for administering fisheries and the marine environment at the provincial/state and district/local levels.

The course provides basic knowledge on the EAFM process and how this can assist in decision-making for responsible and sustainable fisheries.

1.3 Expected results:

Short-term

- understanding of EAFM and the need for EAFM plans;
- enhanced capacity to develop EAFM plans;
- motivation/willingness to develop EAFM plans; and
- motivation for joining community of practice/collaboration.

Participants will produce:

- draft worked examples of EAFM plans; and
- individual action plans linked to group plans (which can be followed up).

Long-term

- more effective fisheries management in the region.

1.4 Key elements trainers need to be aware that:

- EAFM is not a new concept, it is an evolution of what participants already know and currently do;
- EAFM builds on existing structures/processes/people (it is not about recreating whole new systems/practices);
- EAFM is a process; and is all about taking little steps one at a time;
- participants must realise they can actually make small changes (without leadership backing, within their own sphere of influence);
- the 3 components of EAFM: ecological wellbeing human wellbeing and governance, are a practical way of organising and prioritising issues and subsequent action;
- the key course resources, such as EAFM guidelines, were primarily written by scientists from developed countries so they are not always directly applicable to course participants' situation.
- beware when using acronyms because agencies often use acronyms that mean different things or represent already existing concepts – clarify these as early as possible.
- this course focuses on marine capture fisheries, but the steps and process are equally applicable to aquaculture, inland fisheries and other types of fisheries.

One of the long-term goals of the course is to achieve more effective fisheries management in the region, and an important responsibility of a course trainer is to build further training capacity to deliver the course. As a trainer, you should always be on the lookout for agents of change amongst the course participants; and ask yourself, are there potential candidate trainers in the audience?

1. Introduction for trainers

	DAY 1: What & why	DAY 2: How	DAY 3: Plan & check	DAY 4: Do & check	DAY 5: Present
Morning 08.30 – 10.10	**Registration** **Introductions** **Course overview** **1. Threats & issues in fisheries**	**5. Moving towards EAFM** US case study	**10. Step 1: Define & scope the Fishery Management Unit (FMU)** 1.1 Define the FMU 1.2 Agree on the vision 1.3 Scope the FMU	**13. Step 3: Develop the EAFM plan** 3.1 Develop management objectives 3.2 Develop indicators and benchmarks	Quiz review Participant work: refining EAFM plans & preparing presentations
Break					
10.30 – 12.30	**2. Fisheries management and the ecosystem approach** **3. The what and why of EAFM?**	**6. EAFM plans: the link between policy and action** **7. EAFM process overview** **8. Startup A** Preparing the ground	**11. Step 2: Identify & prioritize issues & goals** 2.1 Identify FMU-specific issues 2.2 Prioritize issues 2.3 Define goals **12. Reality Check I** Constraints and opportunities	**14. Step 3: Develop the EAFM plan** *…cont'd* 3.3 Agree management actions 3.4 Include financing mechanisms 3.5 Finalize EAFM plan **15. Step 4: Implement the plan** 4.1 Formalize, communicate and engage	Participant presentations on EAFM key elements to illustrate learning Feedback on presentations
Lunch					
Afternoon 13.30 – 14.45	**4. Principles of EAFM**	**8. Startup A** Preparing the ground *…cont'd*	**12. Reality Check I** Facilitation skills	**16. Reality Check II** Align to EAFM principles Supporting environment	Course review Individual action planning
Break					
15.05 – 16.30.	**(4a) How much EAFM are you already doing?**	**9. Startup B** Engaging stakeholders	**12. Reality Check I** Conflict management	**17. Step 5: Monitor, evaluate and adapt** 5.1 Monitor and evaluate performance 5.2 Review and adapt the plan **EAFM QUIZ**	Course evaluation Course closure and certification
17.00 wrap up	Homework: EAFM progress			Homework: Presentation preparation	

1.5 Course timetable and objectives

Overall course objective: You will understand the concept and need for an Ecosystem Approach to Fisheries Management (EAFM) and acquire skills and knowledge to develop, implement and monitor an 'EAFM plan' to more sustainably manage capture fisheries.

This is a five-day course with the following daily objectives:

Day 1: To understand what EAFM is and why we should use it
Day 2: To understand what moving towards EAFM entails
Day 3: To work through the EAFM planning process
Day 4: To work through implementing EAFM plans
Day 5: To present and receive feedback on group EAFM plans

Day 1 – WHAT and WHY

Participant introductions and course overview:
At the end of the session you will have:

- Introduced yourselves and communicated your personal hopes and concerns for the course;
- Stated aims and objectives of the course;
- Identified threats and issues faced by your fisheries and associated ecosystems.

Fisheries management and the ecosystem approach:
At the end of the session you will be able to:

- Realize a new management approach is required to address the many threats and issues facing; capture fisheries;
- Recognize how ecosystems benefit human societies;
- Understand the concept of the ecosystem approach (EA);
- Describe some of the benefits of using an EA.

The what and why of EAFM?
At the end of the session you will be able to:

- Understand what EAFM is;
- Describe the benefits of using an EAFM;
- Explain how EAFM complements other approaches;
- Understand the complexities of multiple societal objectives.

Principles of EAFM
At the end of the session you will be able to:

- Understand the principles of EAFM and their link to the FAO Code of Conduct for Responsible Fisheries (CCRF).

What is EAFM and how much are you already doing?
At the end of the session you will be able to:

- Revisit your threats and issues and cluster them according to the three EAFM components;
- Understand that you are already doing some aspects of EAFM;
- Analyze your current fisheries practices and identify what EAFM you are already doing;
- Identify gaps in your EAFM practices and possible ways to move forward.

Day 2 – HOW

Moving towards EAFM
At the end of the session you will be able to:
- Learn how an example national government has moved towards EAFM over time;
- Appreciate that the process of moving toward EAFM can consist of a progression of simple actions over many years;
- Understand there is no set form or shape for EAFM because it is country, context and culture specific;
- Determine where your country is at in moving towards EAFM;
- Identify challenges your country faces in moving towards EAFM.

EAFM plans: the link between policy and actions
At the end of the session you will be able to:
- Recognize the need for effective planning and plans to translate policies into actions.

EAFM process overview
At the end of the session you will be able to:
- Describe the key steps of the EAFM process and how to plan, implement and monitor EAFM;
- Identify the planning steps in the EAFM process;
- Familiarize yourselves with an EAFM plan.

Startup
A. Preparing the ground
At the end of the session you will be able to:
- Define startup tasks needed to initiate the EAFM process and co-management;
- Learn how to identify stakeholders.

Startup
B. Stakeholder engagement
At the end of the session you will be able to:
- Define participatory approaches to stakeholder engagement;
- Understand how to organize and hold stakeholder meetings;
- Understand the basic concepts of co-management.

Day 3 – PLAN and CHECK

Step 1 Define and scope the Fisheries Management Unit (FMU)
At the end of the session you will be able to:
- Understand and practice FMU defining and scoping;
- Understand visioning and be able to agree on a vision.

Step 2: Identify and prioritize issues and goals
Steps 2.1 to 2.3
At the end of the session you will be able to:
- Identify your FMU-specific issues;
- Discuss how to prioritize issues through risk assessment;
- Develop goals for the EAFM plan.

Reality Check I
At the end of the session you will be able to:
- Identify the constraints and opportunities in meeting your FMU goals;
- Use facilitation skills with co-management partners in focus group discussions (FGDs);
- Understand the need for conflict management in EAFM and practise a range of techniques.

Step 3: Develop objectives, indicators and benchmarks
Steps 3.1 & 3.2
At the end of the session you will be able to:
- Develop management objectives;
- Develop indicators and benchmarks related to the objectives.

Step 3: Management actions, compliance, finance & finalize EAFM plan
Steps 3.3 to 3.5
At the end of the session you will be able to:
- Agree on management actions and how stakeholders will comply with these;
- Include financing mechanisms in the plan;
- Bring it all together – finalize the EAFM plan.

Day 4 – DO and CHECK

Step 4: Implement the plan
Step 4.1 Formalize, communicate and engage
At the end of the session you will be able to:
- Develop an implementation work plan;
- Summarize what is meant by formal adoption of the EAFM plan;
- Develop a communication strategy.

Reality Check II
At the end of the session you will be able to:
- Check on the status of the EAFM plan implementation;
- Consider whether implementation is in line with the principles of EAFM;
- Check on the practicalities – is the supporting environment in place?
- Re-visit the constraints and opportunities in meeting your FMU goals.

Step 5: Monitor, evaluate and adapt
Steps 5.1 & 5.2
At the end of the session you will be able to:
- Monitor how well management actions are meeting goals and objectives;
- Understand what has to be monitored, why, when, how and by whom;
- Evaluate monitoring information and report on performance;
- Review and adapt the plan.

Day 5 – PRESENT and SHOW LEARNING

Participant group work preparing presentations
At the end of the session you will have:
- Prepared your FMU group EAFM plans presentations.

Participant presentations
At the end of the session you will have:
- Presented your FMU group EAFM plans or tools related to the plan to the wider group;
- Received feedback on your presentations;
- Given constructive feedback on others' presentations.

Course review and individual action planning
At the end of the session you will have:
- Discussed key learning from the course;
- Developed an individual action plan and potential next steps for your agency, to be acted on upon your return to work.

Course evaluation
At the end of the session you will have:
- Completed final course evaluation forms.

Course closure and certification*:*
At the end of the session you will have:
- Received your course certificates.

2.1 How adults learn

To be a good trainer one needs to understand how adults learn. Most of our learning takes place informally, even unconsciously, through everyday experiences. Examples include solving problems, making decisions, and our actions and interactions with others. The experiences from which adults learn are not always pleasant and it is important to remember that we can learn as much from painful and confusing experiences as we can from enjoyable ones. If we do not complete the cycle of learning we are wasting valuable learning opportunities. There are a number of reasons why people sometimes do not learn properly from what they experience. These include:

- not putting aside the time necessary to analyse and reflect upon experiences because of immediate work pressures;
- "running away" or closing oneself off from painful or threatening experiences;
- rationalising bad experiences;
- finding difficulty in questioning one's values, assumptions and perceptions of people and things in general.
- not being courageous enough to try out new ways of doing things in the future.

All of the reasons listed above may contribute to why people do not learn effectively and why they tend to repeat mistakes already made.

All our learning experiences involve going through various stages (or styles):

Concrete experience – feeling. The person is involved in a problem, situation, event or experience. For example, having time to think things over, including brainstorming.

Reflective observation – watching. The person observes what is happening/has happened regarding the problem, situation, event or experience and reflects on it afterwards. For example, step-by-step thinking through, or lectures.

Abstract conceptualisation – thinking. The person uses the observations and reflection in order to generate new ideas, theories, notions and ways of looking at things involving the experience. For example, experimenting with new ideas, looking for practical application or field work.

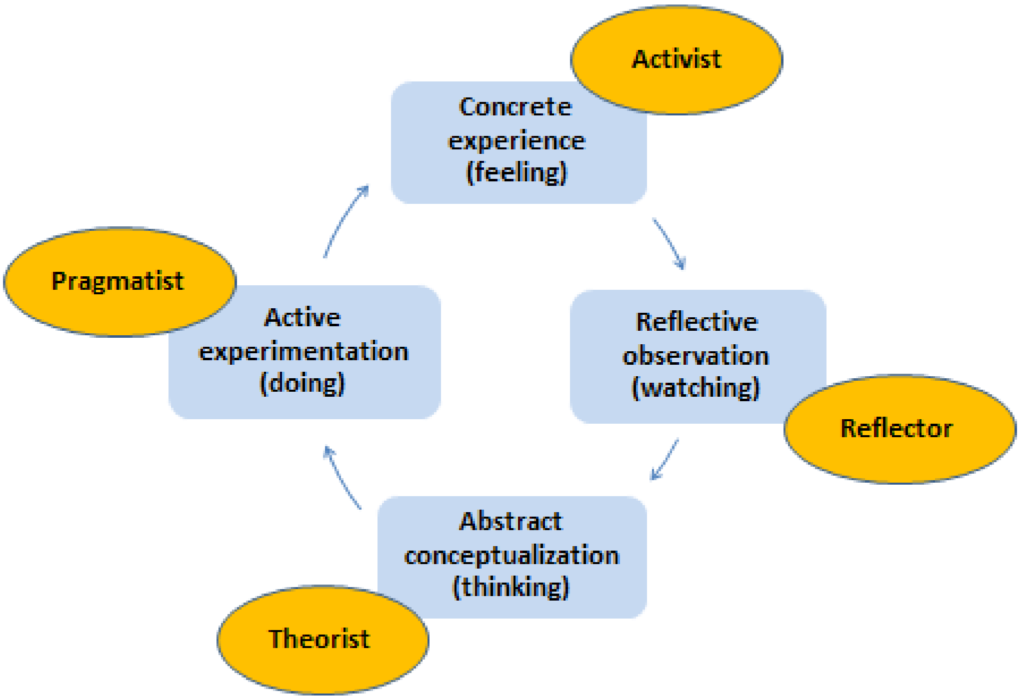
Active experimentation – doing. The person forms plans for taking action in the future based on the above analysis; trying the plans out in similar future experience, event, problem or situation. For example, new experiences, involving others, role-playing, Focus Group Discussions (FGDs), applying learning in field work.

To achieve real learning, we need to complete a cycle of learning stages/styles.

2.2 Learning styles[1]

There are four recognized adult learning styles. Figure 1.2 below represents these four styles and the necessary cycle of learning.

Figure 1.2 The four learning styles



No single learning style is more effective than another; however each tends to have related strengths and weaknesses. Individuals can practice their learning techniques in order to benefit from the *strengths* of each style.

Activists

Activists involve themselves fully and without bias in new experiences. They enjoy the here and now and are happy to be dominated by immediate experiences. They are open-minded, non-sceptical, and this tends to make them enthusiastic about anything new. Their philosophy is: 'I'll try anything once'. They tend to act first and consider the consequences afterwards. Their days are filled with activity. They tackle problems by brainstorming. As soon as the excitement from one activity has died down they are busy looking for the next. They tend to thrive on the challenge of new experiences but are bored with implementation and longer-term consolidation. They are gregarious people constantly involving themselves with others but in doing so they seek to centre all activities around themselves.

[1] Honey, P. & Mumford, A. 1982. Manual of Learning Styles. London: P Honey.

Strengths	*Weaknesses*
• Flexible and open-minded; • Happy to be exposed to new situation; • Happy to have a go; • Optimistic about anything new and therefore unlikely to resist change.	• Tendency to take the immediately obvious action without thinking; • Often take unnecessary risks; • Rush into action without sufficient preparation; • Tendency to do too much themselves; • Get bored with implementation/ consolidation.

Reflectors

Reflectors like to stand back to ponder experiences and observe them from many different perspectives. They collect data, both first hand and from others, and prefer to think about it thoroughly before coming to any conclusion. The thorough collection and analysis of data about experiences and events is what counts so they tend to postpone reaching definitive conclusions for as long as possible. Their philosophy is to be cautious. They are thoughtful people who like to consider all possible angles and implications before making a move. They prefer to take a back seat in meetings and discussions. They enjoy observing other people in action. They listen to others and get the drift of the discussion before making their own points. They tend to adopt a low profile and have a slightly distant, tolerant, unruffled air about them. When they act it is part of a wide picture which includes the past as well as the present and others' observations as well as their own.

Strengths	*Weaknesses*
• Careful; • Thorough and methodical; • Rarely jump to conclusions; • Thoughtful; • Good at listening to others and assimilating information.	• Tendency to hold back from direct participation; • Slow to make up their minds and reach a decision; • Tendency to be too cautious and not take enough risks; • Non-assertive and not particularly forthcoming with little 'small talk.'

Theorists

Theorists adapt and integrate observations into complex but logically sound theories. They think problems through in a vertical, step by step, logical way. They assimilate disparate facts into coherent theories. They tend to be perfectionists who will not rest easy until things are tidy and fit into a rational scheme. They like to analyse and synthesise. They are keen on basic assumptions, principles, theories, models and systems thinking. Their philosophy prizes rationality and logic. 'If it's logical it's good'. Questions they frequently ask are; 'Does it make sense?' 'How does this fit with that?' 'What are the basic assumptions?' They tend to be detached, analytical and dedicated to rational objectivity rather than anything subjective or ambiguous. Their approach to problems is consistently logical. This is their 'mental set' and they rigidly reject anything that doesn't fit within it. They prefer to maximise certainty and feel uncomfortable with subjective judgements, lateral thinking and anything flippant.

Strengths	Weaknesses
• Logical 'vertical' thinkers; • Rational and objective; • Good at asking probing questions; • Disciplined approach.	• Restricted in lateral thinking. • Full of 'should, ought to and must;' • Low tolerance for uncertainty, disorder and ambiguity; • Intolerant of anything subjective or intuitive.

Pragmatists

Pragmatists are keen on trying out ideas, theories and techniques to see if they work in practice. They positively search out new ideas and take the first opportunity to experiment with applications. They are the sort of people who return from management courses brimming with new ideas that they want to try out in practice. They like to get on with things and act quickly and confidently on ideas that attract them. They tend to be impatient with ruminating and open-ended discussions. They are essentially down-to-earth people who like making practical decisions and solving problems. They respond to problems and opportunities 'as a challenge'. Their philosophy is: 'There is always a better way' and 'If it works, it's good'.

Strengths	Weaknesses
• Keen to test things out in practice; • Practical, down to earth, realistic; • Business-like; gets straight to the point; • Technique oriented.	• Tendency to reject anything without an obvious application; • Not very interested in theory or basic principles; • Tendency to seize on the first expedient solution to a problem; • Impatient with waffle; • On balance, task oriented, not people oriented.

Implications of the adult learning cycle

The implications of the adult learning cycle, as described above, are twofold:

- everyone is responsible for his or her own learning development and the practice of learning from experiences should become an integral part of our daily lives;
- those who work in the area of human resources development and training have a responsibility to provide people with the right environment and experiences from which to learn and to help people to learn from them.

Teaching adults is very different to teaching children. The main differences are:

- adults will only learn those things that they perceive will be of use to them, and they need time to decide just what is useful. Children, on the other hand, see anything new as a challenge;
- once having decided to learn something, adults are more strongly motivated than children;
- adults have a wide knowledge and experience; they expect to be treated as equals and not inferiors;
- adults are generally more conservative than children;
- adults have little time available because of other commitments.

As trainers, we therefore have to ensure that the approaches and tools we use are suited to the variety of learning styles.

Activists are more likely to favour…	Theorists are more likely to favour…
• Games and role-play • Brainstorming • Icebreakers and energisers • Problem-solving activities • A wide range of different activities • Experiential activities • Unstructured “play-it-by-ear” activities	• Presentation of theories, models, concepts, systems • Relating the training activity to the relevant theory/model • Ideas; stretching the intellect • Question & answer sessions • Analysis of information • Structures situations • Handouts with detailed background information
Reflectors are more likely to favour…	**Pragmatists are more likely to favour…**
• Observation activities • Video • Research; analysis • Structured group discussions • Exchange of information • Reviewing process; reflecting on group activities and learning from them • Activities building on pre-course work	• Case studies closely linked to participant’s own experience • Demonstrations • Practical exercises: giving participants the opportunity to try things out • Simulations of “real” issues/problems • Actions planning with an obvious end product • Anything with an immediate, practical application • Activities whose end result is quantifiable

2.3 The trainer’s role

The trainer has to wear many hats, but he/she does not need to master everything. However he/she is responsible for the following functions:

i. Preparation (see section 3)

- of training material – researching course content, sequence of presentation, training aids, preparing text, etc.;
- of him or herself – learning course content, practising teaching methods;
- of the training area – obtaining and setting up equipment and furniture, distributing training materials, "timetabling," etc.; and
- of the participant – motivating, supportive, giving feedback, etc.

ii. Presentation and facilitation

The trainer has to be able to:

- demonstrate skills and techniques;
- facilitate group work and group dynamics;
- present information with slides or other visual supports;
- use questioning techniques;
- clarify understanding;
- assign work and tasks;
- oversee practical assignments;
- foster a learning environment; and
- be confident enough in the course content to be flexible and deviate from the session plan when necessary.

Course trainers need to be familiar with, and actively use, Tools no.1, 3, 6 and 8 from the Essential EAFM Toolkit as part of their own training.

iii. Monitoring and Evaluation (see sections 4 & 5)

- of the participants – by observation, by assessing participation, by direct questioning, quiz or test; and
- of the training course – through participant daily feedback and final evaluation questionnaire.

iv. Reporting and sharing learning (see section 5)

- to the participants – through constructive feedback, for guidance of participant actions and to motivate progress;
- to organisers/management and fellow trainers – to share lessons of what worked, what did not, to suggest improvements; and
- to him or herself – to consolidate trainer skills, and to suggest course adjustments or improvements.

v. Caring and helping people to learn

So far, the general ideas have not acknowledged the fact that you – the trainer – are a human being. But participants will often do things for one trainer which they will not do for another. How then can you use this to help your participants learn?

One thing that encourages participants to make more effort is the belief that the trainers care about the participants. It is not enough for the trainer to care. The participants must know that the trainer cares. This should not be done by giving higher marks than other trainers or allowing poor standards of work or behaviour. In fact, this gives the opposite impression. Instead, the way you as a trainer <u>behave</u> will show whether you care or not.

You, the trainer, have to think of ways of making your training sessions more meaningful for participants. You have to be imaginative and think of activities which will be useful for those on the course. You have to take the trouble to give feedback to your participants and to show that you care about their success.

Listed below are some of the key things that will help make it easier for people to learn. Try and ensure you think of these things when you plan and conduct a training session or course.

Training element	How you do it
Active learning	Foster participation and group discussions; ask questions; set problems; organise project work with physical outputs; and practice skills taught
Giving feedback	Explain how well each participant is doing and how his/her work could be improved
Clarity	Make your training clear; participants need to see and hear – speak loudly, write tidily, use visual aids and use simple language
Making your teaching meaningful	Relate what you are talking about to participants' lives and work; use examples; explain how training will contribute to participants improving their work and summarise key points
Ensuring mastery	Check that all participants know the necessary tasks and can perform the necessary skills before and after each session
Individual differences	Let participants learn at their own speed; leave enough free time and use a variety of training methods
Caring	Show that you care whether participants learn; set high standards and get to know each participant; prepare thoroughly for sessions; listen to participants' comments and show respect

To check the "balance" of training design and the results achieved, trainers should ask:
- *Did the training meet the learning objectives identified?*
- *Which sessions worked best and why? (or why not?)*
- *Are there any subject areas or sessions I need to improve?*
- *Are there any training methods I need to practise?*

vi. Self development

In addition to developing others through training, trainers need to constantly develop and learn from actual training experiences by identifying their own strengths and weaknesses and working to improve their training performance each time training is carried out. Continuous development and improvement will help to sustain the trainer's own motivation and commitment to training in the future.

2.4 Training tips

- Ensure training approach is empowering and highly interactive. Use PowerPoints as triggers for discussion. Break into groups/pairs, in different combinations so as to maximize contact and sharing of experiences between all participants. On day 2 to 5, participants need to work in their specific "FMU/area" groups, however, try to ensure they are mixed in other combinations as much as possible during the generic and people skills sessions. This is to maximize exchanges and learning.

- Discussions: many group discussions are built into the sessions, each with allocated time. However, more discussion time will be needed, so trainers need to make more time if possible, e.g. if one activity/presentation finishes early, ensure you use the extra time gained by having more discussion later. Be aware of where the discussions are in each session as you prepare and think of how to create more discussion space.
- Encourage participation as much as possible, by brainstorming and eliciting ideas and experiences. It is the trainer's job to ensure participants feel safe and motivated to contribute to discussions/group work.
- Repeat key messages many times (e.g. the five steps of EAFM; the three components of EAFM – ecological well-being, human well-being and governance; the seven principles of EAFM).
- Draw out links between sessions and topics as much as possible.
- When introducing a new term, agree to a definition (make use of glossary). Be very careful how you use terms to avoid confusion. Ensure the term is translated and understood in participants' main language(s).
- It is the trainer's responsibility to do research/find out a little about the country/region in which training will take place. This is to ensure that they are aware of the various contexts predominating in each situation.
- Trainers have to act in a culturally sensitive manner; they need to know their audience and what is acceptable in terms of participation.
- Use the notes in PowerPoint slides to explain each slide and expand on the content. Also bring in your own experience by contributing relevant examples.

2.5 Role play as a training technique

Role playing is a training technique in which participants assume another identity to cope with real or hypothetical problems in human relations and other areas. In the Essential EAFM course, role play is used to explore conflict resolution and mediation between stakeholders in Session 12 Reality Check I.

In role playing, participants act out behaviour patterns they believe are characteristic of those roles in specific social situations. For example, two participants might act out an exchange (one taking the role of a fisher, the other that of government fisheries officer). Major variables include (a) the role itself; (b) the role requirements (that is, the specific behaviour patterns the player builds into the role); (c) the social situation presented to the person playing the role; and (d) the participant's own personality as it takes on the character of the role it is playing.
The advantages of role playing include:

- providing an opportunity for developing insight into what is happening when it is happening;
- emphasizing the importance that feelings and emotions play in many problems, especially problems associated with human relations;
- enabling the participant to see a situation from a different perspective;
- role playing, successfully handled, develops the interest of the learner, thereby providing a dynamic situation during the course of which old attitudes can be modified and new attitudes developed.

<u>Structured role playing</u>
In this type, the trainer selects both the situation and roles to be enacted, and specifies the goals of the role playing activity. This type of pre-planned role playing provides, in some cases, very

elaborate written materials describing the roles and the situation, and elicits complex responses from the observers. In simpler cases, for example, if the goal for the group is to study different mediation patterns, the trainer /facilitator might assume the role of the mediator in the role play, and orally assign the other roles.

Spontaneous role playing
This approach relies on the problem situation arising from the group discussion, without advance planning by the group or leader. In this instance, the enactment itself serves as the "briefing" to the group on the problem and the situation.

Both structured and spontaneous role playing relate to learning through:
- doing;
- imitation;
- observation and feedback;
- analysis.

Therefore, role playing represents a form of experiential learning.

Designing the role play
A role playing session begins with a preparation period during which the participants and the audience are given as much information, written or oral, as necessary to create a situation that parallels reality. Players must be given time to fix their characters in their minds, and the audience is usually oriented to what they should watch for.

The simple role playing design calls for the enactment of the role play, followed by discussion. The analysis and discussion centre around criticising the character's handling of and reaction to the conflict situation. In order to maintain the illusion and the low-pressure atmosphere, role names rather than real names are usually used. To discuss the role play, the audience can be divided into sections or special observers may be chosen in advance to form a panel.

Role playing procedures are quite effective in examining feelings and providing opportunities for skill practice in a realistic setting. New principles and concepts can be provided while participants experience the actual feelings involved. Constructive feedback allows for self-analysis and reflection.

Procedures for conducting a role play

Pre-work

Carefully choose or write a role play that will enable participants to "experience" the particular situation or practice a particular skill or both. Prepare brief, informative guidelines covering i. general information and background (if necessary), ii. brief information for each "player" (usually two or three), and iii. guidance for observers.

Introduction and warm-up

Explain that the purpose of the role playing exercise is to provide insight and an opportunity to practice skill. By being in real life situations, participants will be able to try things out in a situation where it is safe to make mistakes. Hold a brief discussion to provide warm-up of the topic. Divide group into sub-groups or small units and assign "roles". Give directions, pass out sheets for each role, ask participants to read the role descriptions and "get in the mood" to role play. It may be necessary to remind participants that that they should approach the role play seriously and that they are not allowed to invent new details. When doing multiple role playing, all should be conducted at once. When each small group is finished, participants should discuss what happened and what can be learned from the experience. Within the small group, there may be opportunity for the observer to provide feedback.

After the role play
All small groups should reconvene. If appropriate, the trainer calls on each group to report what happened and what has been learned from the role play. Key roles provide their feedback first, then observers, then others. The pattern for discussion with individual groups or with the whole group usually follows this general format: What happened? How did various participants "feel" during the interview? Ask participants, what opinions do they have about the situation and about the other person? How did these factors affect the communication and outcome of the role play?

If the purpose of the role play was to practice a particular skill or technique, then it is important for the trainer to discuss the ways in which these are effective or ineffective. The trainer should ensure that gains relating to insight and skills are summarised and clarified at the end of the role play session.

3.1 Planning and logistics

As soon as course dates have been agreed and a venue has been arranged, course organisers need to designate a small support team which assist with the planning, organizing and actual day-to-day logistics of the course. Such an administrative team is of vital importance to a successful training course. Not only can they be responsible for arranging the training room, transport, refreshments, accommodation and entertainment, they can also help to type up participant outputs and sort out any practical problems that may arise so as to allow the trainers to focus solely on delivering a good quality course.

3.1.1 Resources needed in training room:

Room layout

The training room needs one wall or screen onto which the PowerPoint slides are projected. Displaying course materials and participant outputs is an integral part of the course, therefore, all the other walls must have as much space as possible for displaying large posters, visuals, photos, and all group outputs (using sticky tack/ pins). Additional moveable pin boards/ white boards are useful.

Other major considerations include:

- the training venue will be suitable for up to 35-40 people, real daylight preferable;
- arrange 5-6 round or square tables in café/cabaret style, with 5-6 chairs placed around each one. Do not arrange room in U-shape;
- 1 main laptop (dedicated to projecting PowerPoints) connected to a projector arranged on a small table to project to a screen at the front of the room;2-3 other spare tables (rectangle shape) at back of the room for paperwork/ resources/ spare trainers;3 separate flip chart stands (and a good supply of flip chart paper) and working (!) pens;
- white boards;
- plenty of extension leads;
- spare laptop to use for administrative tasks;
- a few pens / pencils and paper for participants;
- possibility of space for break out groups;
- internet and access to a portable printer in the room
- space to store participants' outputs.

Stationery requirements include:

- scissors x 8 (approx.);
- paper clips;
- 2 packs white A4 paper;
- 4-5 packs of coloured A4 card (at least 3 different colours);
- few packs of colored A4 paper;
- sticky tape;
- masking tape;
- 10-15 blocks of post it notes of different colours;
- 10 packs of sticky tack;
- pins for pin boards;
- sticky dots, labels, etc.

Ensure you can keep the same training room for the duration of the course, and that it is available overnight (this allows you to store all course materials and outputs/displays without having to rearrange everything each morning).

3.1.2 General training checklist

Training facilities

- Availability of training rooms?
- Are they clean and tidy?
- Is a blackout / electricity cut possible?
- Are there enough white/blackboard/flipcharts?
- Is there enough wall/display space?
- Are there enough tables and chairs?
- Can the furniture be re-arranged?
- Has projection equipment been ordered and checked?
- Is there a reliable internet connection?
- Are there any spare bulbs, extension leads, markers, chalk?
- Is there a refreshment/rest area?
- Is there sufficient space for breaking out into smaller groups?
- Are there administrative support staff; have you clarified their role before the start of the course (responding to logistical queries, administrative support for trainers (e.g. typing up course outputs on a daily basis; ensuring all materials and stationery available, etc.)?

Training materials

- Is there enough paper, pens, tools, etc. for each participant?
- Enough copies of printed handouts, text books, etc.?
- Is there one main laptop for projection and a spare for trainers?
- Have PowerPoint slide sets, training activities/cards/games been prepared?
- Is there a complete (and spare) set of session plans?
- Are there display materials?
- Is all necessary stationery assembled?

Trainers

- Is there a timetable with clear session allocation (i.e. which trainer delivers which session)? Are all trainers prepared for their sessions?
- Have guest speakers or resource persons been arranged?
- Do they need transport and/or accommodation?
- Do they understand any set procedures, established methods and monitoring requirements?

Training field work (optional)

- Is there enough transport?
- Have the details of the itinerary been prepared (especially timing)?
- Have the people you intend to visit been notified?
- Have these people been met before to ensure they are suitable?
- Will refreshments be made available?
- Will all equipment and materials be provided or do they need to be taken with you?

Residential training

- Accommodation?
- Food and refreshments?
- Entertainment?
- Study areas and resources?
- Security?
- Financial allowances?

3.2 How to prepare to deliver a session

Trainers should have a good understanding of the material to be presented; however, you are not expected to be an expert in all areas. You may be required to read up on topics that you know you are less familiar with in order to be able to facilitate the session to the level required for the audience you are working with.

Session Plans (see section below 3.3) are key to a successful session. Also, be sure to go through the PowerPoints for each day to check your own understanding. Depending on the feedback from participants, you may want to edit the presentations or adjust your delivery style.

When you start presenting, be sure to remind participants where they are in the course and link the current session to the previous sessions (in some cases this may be the last session delivered but could also a delivered session from much earlier in the course). Start steadily and be sure to acknowledge that participants understand what you are expressing through both verbal and non-verbal communication. To help with this, be sure that you are able to read body language.

3.3 Using session plans (SP)

There is a detailed session plan to guide each session of the course. Each session plan details the day, session title, objectives and planned time slot. There are five columns which are fairly self-explanatory:

1. Description of contents (title of each topic covered).
2. Time (planned time for each topic/activity).
3. How to run the session (steps trainer actually goes through to run the session – i.e. what you do).
4. Expected participation ranging from low to high on a scale of 1-5
   1: the trainer talking/presenting.
   2–3: there is a bit of discussion/brainstorming, but topic is trainer-led.
   4: participants working in groups much of the time.
   5: complete group/pair work, or individual work. Trainer only facilitates group processes.

This section gives a quick indication of how active participants will be in the session. The aim is to have a balance between trainer-led topics and those where the trainer takes a more backstage role when participant engagement is high (remember what was previously discussed in the active experimentation stage of the adult learning cycle).

5. Resources used (this will show which slides to use and when; what Toolkits to refer to and when; which module to refer to; what stationery you need, etc.). Use this to ensure you are prepared ahead of starting the session.
6. Notes. The bottom section is for any additional notes/points that trainer needs to be aware of, as well as trainer feedback after running the session (to improve on subsequent session or Essential EAFM course).

Note: Session plans are designed to provide step-by-step guidance. However, they may need to be adapted to different training situations, depending on participants and context. See next page for an example of a session plan from this course.

SESSION	**11. EAFM STEPS 2.1–2.3 IDENTIFY AND PRIORITIZE ISSUES AND GOALS**							10.30–12.00 (90 minutes)
Date:	Day 3 session 11							
Objectives	• Identify your FMU-specific issues • Discuss how to prioritise issues through risk assessment • Develop goals for the EAFM Plan NB. This session finishes at 12.00 and then session 12 Reality check runs 12.00- 12.30 BEFORE lunch.							
Description of contents	**Time**	**How to run the session**	**Expected participation**					**Resources used**
			1	2	3	4	5	
Introduction	5	Explain Step 2; refer to flipchart of EAFM cycle on wall. We are still at the stage where stakeholders are engaged through participatory workshops; now need to identify the fishery issues. On Day 1 participants identified various fishery management issues; in this session we will refine these for their FMUs.	X					Slides 1-3
Identify issues	5	Slides 4-5: how to identify issues, run through what you need to think about. Explain that on Day 1 of the course we identified issues as an icebreaker. But in the EAFM process Step 2.1 is when you would get stakeholders together and identify issues. EAFM team would have a prior idea of some of these, but the participatory nature of the exercise should ensure that issues do reflect diverse views and needs. Expect some discussion/conflict even at the identification stage. Need to keep breaking down issues until you get to ones that can be addressed by management actions. Refer to examples in Issue checklist in Module 11 section 2.1. Slides 6-7: examples of identifying issues using causal chain analysis	X					Slides 4-7 Module 11 Step 2, section 2.1
Group work: *Activity: revisit issues*	20	Slide 8 : activity instructions Revisit fisheries issues from day 1 (on flipcharts from generic groups, not FMU specific) and modify to reflect your FMU. 1. In their groups, participants revisit the general issues that were generated on Day 1 morning and initially categorised on Day 1 afternoon. Now, knowing their FMU, participants modify issues to those relevant to their FMU at a level that can be addressed by management actions (remove drivers and look for root and proximate causes). They still need to reflect 3 EAFM components. Session Output: an issue categorization for each FMU on flipchart and in their workbooks. 2. Participants move around and look at each other's work; brief plenary: challenges in identifying/categorizing; possible tools.					X	Group work slide 8 Flipcharts with issues from day 1 Cards (different colours), pens, flipchart sheets, sticky tack Trainer refer to checklist of possible issues in Trainer resource guide
Prioritising through risk assessment	5	Run through slides 9-11, explain purpose of risk analysis. You have identified lots of issues; they cannot all be managed; need to prioritize those that are high risk and try to manage those. Elicit if anyone is familiar/has experience with risk analysis. For what? It is a common tool in project management. Refer participants to Module 11, section 2.2 for more tools for risk assessment).	X					Slides 9-11, Module 11, section 2.2

Identify FMU goals	5	Slide 12: building the EAFM plan – we now add Goals Slide 13: developing goals for identified sets of issues. A goal is a general statement of the desired state towards which the stakeholders are working. A good goal meets the following criteria: it is relatively general and addresses a set of issues that can be grouped under a theme.	X					Slide 12-13
Summary	5	Slides 14- once you have done Step 2, the outputs can be slotted into the EAFM plan Slide 15- key messages	X					Slides 14-15
Activity: FMU risk assessment work	(40 total) 10+ 10+ 10+ 10	Now the groups actually do their FMU risk assessment work. Instructions slide 16. 1. Groups do a risk assessment for their issues: either using the low/medium/high matrix (semi quantitative risk assessment) or a simple ranking (can do pairwise or cards). The aim of the activity is that they need to identify those issues which are HIGH RISK, as these are the ones we will develop objectives for, etc. Medium risk issues may also need action or monitoring. Low risk issues need only monitoring. 2. Now participants group their high risk issues by theme (they may end up aligning with three EAFM components). Participants need to record this on flipcharts as well as in their workbooks (allow 10 of the 30 minutes to ensure outputs are written up). 3. Agree goals for EAFM plan. Participants write up in their workbooks.					X	Group work slide 16 Tool 29 Workbook
Embedding EAFM Plan	5	Living the EAFM plan pyramid (see photos in trainer resource guide) Everyone stand at back of the room. Hand out the A4 cards for the four elements of pyramid so far (see slide 12). Get participants to stand in positions that represent the slide (but do NOT show the slide). After the first few times, they will understand what to do. They all enjoy 'living' the visual. Conclude by saying we are slowly building the elements of the EAFM plan (Steps 1-3). Tomorrow we will work on developing objectives and indicators from their issues. Now go straight into Reality check I for 30 minutes before lunch.					X	A4 cards with words: vision, goals, participation (split into 5 syllables) + informed decisions (split into 2)
<u>Notes for trainers</u> If identifying issues takes less time, move on to risk assessment and give more time to do this. Over lunch trainer looks at FMU issues that have come up and thinks of 4-5 objectives as examples: good (those that can be addressed by management actions) and bad (those that cannot be addressed by management actions) to explain in session 13 first thing on Day 4.								
<u>Trainer feedback</u>								

4.1 Pre-course assessment

After registration on the first day of the course, participants need to individually complete a pre-course assessment (refer to assessment folder). This takes about 20 minutes and will provide trainers with a snapshot of participants' knowledge of key EAFM issues. The end of course assessment completed on the last day has a similar format so that trainers can assess level of learning and improvement.

4.2 Daily monitoring

This is done on Days 1 to 4 of the course. The course can use both qualitative (4x4 matrix) and quantitative (mood meter) daily monitoring. The main point is that trainers need to get feedback at the end of the training day to know what participants are thinking, and feeling, and this feedback needs to be anonymous.

Monitoring groups

Agree monitoring groups at the end of Day1. Ensure the groups are different from the course FMU groups; you could use the fish cards (see Session Plan n. 4 and Additional trainer resource folder) or another group sorting process. At the end of each day all the groups discuss for five minutes and complete the 4x4 daily monitoring matrix pictured below on a sheet of A4 paper. Trainers need to have printed enough A4 size copies of the matrix (start the course with 20 blank copies). Then the trainer meets with a group formed of one representative from each monitoring group. These representatives feed back to the trainers the comments from their group. This allows for all concerns to be voiced, but the person who feeds them back is not necessarily the original voice. Trainers note down all feedback and collate it daily. They must respond to feedback and address as appropriate. Monitoring groups stay the same for each day; ensure a different representative stays behind to feed back each day. Refer to Assessment folder for an A4 sample of the daily monitoring matrix to copy and use.

Keep it:	Change it:
Add it:	What I will remember:

Mood meter

The mood meter can be used after morning or afternoon sessions, or at the end of a day. Put up a flipchart sheet with five smiley faces from very happy to very unhappy on horizontal axis, and along the vertical axis put the days (divided into a.m. and p.m.). Give each participant a sticky dot which they place next to the face that most represents how they feel at that point in the course. It is best if the trainer shows how to do this, but then does not look at who is putting which dot where (so as to keep anonymity). Give dots a score of 5 to 1 from very happy to very unhappy and add up the scores for all dots to get the daily score. If you get dots in the middle, or towards the unhappy face this is a signal to trainers that things are not going well and trainers need to pay extra attention to comments/feedback to ensure the majority of the group is kept happy. The downside of using a mood meter is that people tend to place dots where others have placed them; this can have a negative visual effect if they lean towards unhappy.

4.3 Daily review

At the beginning of Days 2 to 5 there is a 10 minute review of the contents/issues of the previous day. This can be i) trainer- or ii) participant-led. If the trainer does the review, ensure that you elicit the main points from the previous day from participants using different techniques (i.e. not just standing at the front, in a lecture type format).

If the review is to be led by participants, explain the task at the end of Day 1: every day a different group will do the review. Get some participants to volunteer for each day (random groups), write this list down and keep it visible so groups know when it is their turn. The trainer must ensure that the review covers main issues, by commenting/adding. The trainer also needs to address issues that come up in daily monitoring if these have not already been covered.

If the Essential EAFM course has a Training of the Trainers (TOT) component attached to it, ensure that the potential trainers on the Essential EAFM course get a chance to lead the daily reviews (this gives you an idea of their training/facilitation skills so that you can better tailor the TOT).

4.4 Energizers (refer to IMA energizer booklet in Additional trainer resource folder or use your own).

Energizers are quick (5 to 10 minute) fun activities that help to re-energize participants, enable them to physically move about, laugh and think of something totally unrelated to the training course. Use energizers when you feel concentration is dwindling; when you see participants dropping off; after you come back in from lunch break, etc. All trainers should be comfortable with trying out a few routine as well as new energizers.

4.5 Dealing with challenging situations

When faced with a challenging situation, try to assess whether the challenge presented is within your circle of influence. This can help you decide what to do and whether to do anything at all.

Dominant participants: they are common on all courses. The idea is to try and channel their energy and enthusiasm by giving them tasks, i.e. get them to write on the board and gather information from the group. Always be polite, ask for their respect for fellow participants and check on the ground rules each day.

Quiet participants: again, they are common and can be a combination of genuinely shy to lazy. Remember, people often find it difficult to offer suggestions or participate in discussions in groups of more than eight so keep group sizes manageable and be sensitive during the plenary sessions. Direct questions to them individually and if you feel comfortable with this ensure they are responding to something they know about easily i.e. “tell us about the work you do...”.

Challenges with venue: rooms can be too small, too hot/cold, noisy, etc. By visiting the training venue before the event begins, you may be able to solve some of these issues prior to the event starting.

EAFM Quiz

At the end of Day 4, participants are asked to complete an EAFM Quiz (refer to assessment folder). This tests the participants' knowledge of key EAFM areas and shows current understanding of EAFM issues. Trainers distribute the quiz and score sheet to everyone. Participants have 15-20 minutes to complete the nineteen questions individually by marking their answers on the score sheet. Trainers collect the score sheets and mark them after the course closes on Day 4 (using the trainer answers), noting the areas that need further clarifications. Trainers run through the answers on Day 5 to ensure all participants are comfortable with key elements. The results need to be collated and recorded using the Excel score sheet (this can be done by administrative staff early on Day 5).

If there are any training-of-trainers candidates or potential trainers on the EAFM course, it is hoped they would score over 75% on this quiz.

End of course evaluation

At the end of training you will need to get participants to quietly and anonymously complete evaluation forms. Refer to Assessment folder for end of course evaluation which is divided into two parts. Part 1 asks participants whether they feel the course objectives have been achieved and asks them to rate the usefulness of the course as a whole as well as the importance they give to different course components. Part 1 is structured in the same way as the pre-course assessment so that questions can be taken from each and compared for 'before' and 'after' opinions. When analysing the forms, trainers can compare question 3. in the pre-course assessment with questions 6. and 8. in the post course evaluation Part 1.

Part 2 asks participants how they rate trainers, course delivery and the course as a whole. This part does not deal with course content; instead it asks participants to assess delivery, style, approach and support facilities.

The completed forms need to be collated and the results included in the trainer course report. Trainers and course organisers need to analyse evaluation results, share lessons and make recommendations for future training. Feedback on trainer delivery and behaviour also needs to be taken into account as self-analysis and self-development are important trainer skills.

The Essential EAFM Assessment folder contains the following elements. See the relevant session plans for more details.

Assessment element	When to use it
Pre-training course assessment	Day 1, SP session 1
Quiz - participant	Day 4, SP session 17
Quiz - participant multiple choice form	Day 4, SP session 17
Quiz - trainer answers	Day 4, SP session 17
Quiz - Excel score sheet	Day 4 or 5, SP session 17
End of course evaluation – part 1	Day 5, SP session 20
End of course evaluation – part 2	Day 5, SP session 20
Daily monitoring form	Days 1 - 4, SP sessions 4,9,12 and 17.

6. Key Messages

In the table below are the key messages for each session. Trainers must ensure participants understand these messages.

Session & module	Key messages
1. Threats and issues to fisheries	• There are many threats and issues to sustainable fisheries • Many of these are familiar to participants • Issues are common across the region and some are transboundary; it is therefore a good idea for countries to cooperate in addressing them and learn from each other
2. Fisheries management and the Ecosystem Approach (EA)	• Threats and issues to sustainable fisheries are broad in scope with a number of threats and issues falling outside existing fisheries management approaches • EA is about integrative management across land, water and living resources • EA is a way of implementing sustainable development that promotes balancing ecological well-being with human wellbeing through good governance so that future generations can also benefit from the ecosystem services that healthy ecosystems can provide
3. The what and why of EAFM?	• EAFM is simply applying EA to fisheries and because it is an approach to promote sustainable development, it has three components – ecological well-being, human well-being and good governance • There are many benefits in using an EAFM • EAFM builds on existing management (i.e. we move towards EAFM) • It complements and overlaps with other forms of integrated resource management (e.g. ICM/ICZM)
4. Principles of EAFM	• EAFM principles are not new and are based on the FAO Code of Conduct for Responsible Fisheries (which your country agreed to implement) • EAFM has seven main principles 1. Good governance 2. Appropriate scale that takes into account connections within and across ecosystems and social systems; across administrative scales, and across time scales i.e. the impact of short- and long-term climatic variability of fisheries 3. Increased participation of key stakeholders 4. Management for multiple objectives (balancing societal trade-offs) 5. Cooperation and coordination horizontally both across different levels of government and society and across agencies and sectors 6. Embracing change, learning, adapting (adaptive management) 7. Adopts the precautionary approach when uncertainty exists • The principles can be used to track the implementation of EAFM
5. Moving towards EAFM	• These case studies demonstrate that implementing EAFM takes time • EAFM is an iterative and adaptive process, lessons learned along the way • Many fisheries are doing EAFM in part, moving towards EAFM does not require drastic change but many small steps through time
6. EAFM plans – the link between policy and action	• High level principles and policies cannot be implemented as they stand • EAFM plans provide a link between higher level policy (e.g. National fisheries policy) and management actions on the ground • In this way, management actions in EAFM will promote the implementation of the high level policies over time

7. EAFM process	• The EAFM process is based on the simple adaptive management cycle of (i) planning, (ii) doing/implementing and (iii) checking and improving • The five steps of the EAFM process are repeated throughout the course and are fundamental. Steps 1-3 are planning steps: 1. Define and scope the Fisheries Management Unit (FMU) 2. Identify and prioritize issues and goals 3. Develop the EAFM plan Step 4 is doing: 4. Implement the plan Step 5 is checking and improving 5. Monitor, evaluate and adapt
8. Startup A – Preparing the ground	• Before embarking on the EAFM cycle, some preparatory work to get organised and initiate stakeholder engagement is important • There are eight tasks to carry out in Startup A that include: forming an EAFM team with a facilitator; identifying the broad area for management; identifying stakeholders and forming a key stakeholder group; coordinating with other agencies and carrying out a legal review • The key to good preparation is the identification and formation of the key stakeholder group; this can be achieved through a stakeholder analysis
9. Startup B: Stakeholder engagement	• Stakeholders need to be engaged right from the beginning of the process, and once initiated, their involvement will continue throughout the EAFM process (planning, implementation, and monitoring and evaluation) • EAFM involves developing co-management arrangements: i.e. "Partnership arrangements in which a community of local resource users, government, other stakeholders and external agents share responsibility and authority for the management of the fishery, with various degrees of power sharing" • Stakeholder engagement requires good people skills and there are a number of tools that can be used
10. Step 1 - Define and scope the FMU	In Step 1: • The fishery and boundaries of the unit to be managed are agreed (FMU) • A common vision for the FMU is developed with stakeholders • Background information on the existing ecological and human aspects and governance arrangements of the FMU is collated
11. Step 2 – Identify and prioritise issues and goals	In Step 2: • Issues are prioritized so that only the most important ones are addressed in the EAFM plan • Based on themes for prioritized issues, goals are agreed for each theme
12. Reality Check I	• At this stage in developing an EAFM plan, it is a good idea to step back and assess the constraints and opportunities that may hinder or help meeting the goals • Many of the so-called constraints may be overcome through more effective focus group discussions and better conflict resolution

13. Step 3.1-3.2 – Develop objectives, indicators and benchmarks	In Step 3.1-3.2: • Management objectives are developed. This involves agreeing on what is to be achieved for each high-priority issue • Objectives are paired with indicators and benchmarks to assess in future whether the objective is being achieved
14. Step 3.3-3.5 Management actions; compliance, finance and finalize EAFM plan	In Step 3.3 – 3.5: • Management actions are decided for each objective • Compliance with management actions is also considered • Duplicate actions are removed • One management action can often address several objectives • The outputs from the preceding steps are used to create the EAFM plan • Included in the plan are details on finance and references to communication and reviews • The plan can now be finalized.
15. Implementatio n. Step 4.1: Formalize, communicate and engage	In Step 4.1 • An implementation work plan is needed to put the plan into action – outlining who does what, how and by when • The EAFM plan needs to be formally adopted, otherwise it will be just another document on someone's desk or shelf • The plan needs to be communicated widely through a communication strategy
16. Reality Check II	• Reality check II involves checking the status of the plan implementation and considering whether governance, co-management and the supporting environment are in place • It does not matter how good the plan is, without the supporting environment it will not be successful
17. Step 5.1 - 5.2 Monitor and evaluate performance (M&E) and adapt the plan	In Step 5: • Monitoring and evaluation (M&E) and reviewing and adapting the plan completes the adaptive management cycle • Yearly review: are the plan objectives being met? (if not, adapt the management actions and compliance arrangements) • 5-yearly review: are the plan objectives and goals being met? (if not may, it be necessary to revisit issues, goals as well)

7. List of activities participants carry out during Essential EAFM course

This is a list of all the activities that participants carry out during the course.

Session	Step/phase	Activity/group work
1		Identify threats and issues in fisheries
2		Discuss fisheries management in your country
2		Sort threats and issues
2		Brainstorm benefits of an ecosystem approach
3		Balancing societal objectives – discuss video clip
4		Plot your fishery timeline
4		Discuss scaling your fisheries management
4a		Revisit threats and issues and cluster into three EAFM components
4a		Identify EAFM elements you are already doing; identify the gaps, suggest ways to improve
4a		EAFM continuum for individual fishery
5		Review EAFM continuum for individual fishery and plot for local or country fishery
5		Identify challenges and opportunities in moving towards EAFM
7		Embedding EAFM steps (circle activity)
7		Form FMU groups
8	Startup A	List all FMU stakeholders and plot them onto importance/influence matrix
8	Startup A	Plot FMU stakeholder relationships onto a Venn diagram
9	Startup B	Draw good/bad facilitator
9	Startup B	Practise active listening
10	Step 1.1	Map your FMU
10	Step 1.2	Agree FMU vision
10	Step 1.3	Identify type of information needed for scoping FMU
11	Step 2.1	Revisit FMU threats and issues, select those that can be addressed by management
11	Step 2.2	Prioritize issues through risk assessment, group into themes
11	Step 2.3	Identify a goal for each theme
12	Reality Check I	Consider constraints and opportunities to meeting these goals
12	Reality Check I	Practise focus group discussion
12	Reality Check I	Map your FMU conflicts
12	Reality Check I	Win-win role play (conflict management)
13	Step 3.1	Develop operational objectives
13	Step 3.2	Select indicators and benchmarks for objectives
14	Step 3.3	Agree management actions, and relevant compliance and enforcement actions
14	Step 3.4	Agree financing mechanisms
14	Step 3.5	Finalise the EAFM plan
16	Reality Check II	Seven principles review matching exercise
16	Reality Check II	Revisit constraints and opportunities to achieving your FMU goals

8. Matrix showing linkages between course materials

Session	Module	PowerPoint	Workbook link	Trainer Resource Guide	Tool No.
DAY 1					
1. Course overview & Threats and issues	9 pages	10 slides	n/a		
2. Fisheries management and the ecosystem approach	7 pages	21 slides	n/a		
3.The what and why of EAFM	8 pages	15 slides	n/a	Video clip cards (activity balancing societal objectives)	
4. Principles of EAFM	13 pages	20 slides	n/a	Photo of timeline	1, 2, 8, 20, 21, 22, 38
4a. How much EAFM are you already doing?	n/a	4 slides	Continuum table p. 3-4		
DAY 2					
5. Moving towards EAFM	7 pages	20 slides	Continuum table p. 3-4 Challenges and opportunities p. 5		
6. EAFM plans - the link between policy and action	5 pages	8 slides	n/a		
7. EAFM process overview	6 pages	17 slides	n/a		
8. Startup A Preparing the ground	8 pages	17 slides	Stakeholder list and matrix p. 6-7 Venn diagram p. 8	Trainer checklist of possible stakeholders; photos of matrix and Venn diagram	

8. Matrix showing linkages between course materials

9. Startup B Stakeholder engagement	9 pages	18 slides	n/a		1, 2, 3, 4, 9, 11, 12, 16, 17, 18, 37
DAY 3					
10. Step 1.1-1.3 Define and scope the FMU	7 pages	26 slides	Define FMU and vision p. 9; scope FMU p. 10	Photo of maps Photo of building EAFM plan	11, 12, 16, 17, 20, 21, 22, 23
11. Step 2.1-2.3 Identify and prioritize issues and goals	7 pages	16 slides	Identify and prioritize p. 11-12 Goals p. 13	Trainer checklist possible EAFM issues	26, 27, 29
12. Reality Check I	8 pages	18 slides	Constraints and opportunities to FMU goals p. 13 Win-win solution role play p. 14	Role play scenario cards	7, 8
DAY 4					
13. Step 3.1- 3.2 Develop objectives, indicators and benchmarks	6 pages	20 slides	Develop objectives p. 15; agree indicators p. 16	Photo of building EAFM plan	3, 30, 31, 32, 38
14. Step 3.3 - 3.5 Management actions, compliance, finance + finalize the plan	9 pages	22 slides	Management actions and finance p. 17	Photo of building EAFM plan	28, 33, 34, 35
15. Step 4.1 Formalize, plan, communicate and engage	5 pages	13 slides	Implementation work plan p. 18 Communication plan p. 19		3, 4, 13, 14, 15, 25, 36
16. Reality Check II	14 pages	10 slides	Re-visit constraints and opportunities to FMU goals p. 20	7 principles review matching exercise cards	1, 2, 3, 4, 5, 6, 9, 10, 19, 22, 38
17. Step 5.1-5.2 Monitor, evaluate and adapt	6 pages	19 slides	Performance template p. 21-22 EAFM progression matrix p. 23-24		38

9. Selected resources

A. Balancing societal objectives discussion cards for session 3
B. Additional trainer checklists for session 8
C. Additional trainer checklists for session 11
D. Conflict role play scenarios for session 12
E. Seven EAFM principles matching exercise for session 16
F. Photos of sample participant outputs (only in version with photos)

***Trainer instruction*:** print and cut up enough cards for each group. See session plan 3. for more detailed instructions.

1. Read the question 2. Watch the video clip and use question for discussion What impacts are the fishing activities having on target and associated species and the broader ecosystem?	1. Read the question 2. Watch the video clip and use question for discussion What impacts are the fishing activities having on human resources?
1. Read the question 2. Watch the video clip and use question for discussion What impacts are the fishing activities having on the economics of the sector and society as a whole?	1. Read the question 2. Watch the video clip and use question for discussion What other drivers encourage/discourage the fishing activities? (these may be beyond the control of fishery management)

***Trainer instruction*:** this checklist details possible stakeholders in the EAFM process. Not all stakeholders listed will be relevant to groups on the course, but many will be.

This checklist is only for the trainer. Have a hard copy with you so you can refer to it during session. In Startup A Task vi. the trainer asks groups to list all the possible stakeholders for their FMU. Let participants start with this activity and use the checklist to make suggestions and prompt the groups, either if they cannot think of any stakeholders, or if they can only think of few obvious ones. The idea is that you want them to think *as broadly as possible* and realise that many more agencies/bodies are FMU stakeholders than they originally thought. It may be that the groups generate many of these categories and do not need prompting. Remember to tailor this list for the course audience, make sure you know the local specific names or terms for these organizations.

NB. This list is a work in progress: as trainers you should to keep adding to this list.

1. **List of possible FMU stakeholders which DO/MAY HAVE responsibilities and/or a legal mandate in coastal fisheries or other coastal environment-related activities:**
   - Government department
   - National Fisheries department
   - National Environment/Conservation department
   - Police department
   - Quarantine
   - Ports and marine authority
   - Customs and Excise department
   - Tourism department
   - Agriculture department
   - Health department
   - Government training facility (Fisheries/Marine)
   - Provincial/state/local environment/conservation
   - Provincial/state/local fisheries
   - Traditional “marine species management” authority
   - Lands/Mineral Resources department
   - Island Council/Other general local government
   - Local NGOs
   - Local community
   - Local fishers’ association
   - Natural resources conservation service
   - Department of Commerce
   - Investment authority
   - Ministry of Works, Infrastructure and Transport
   - Village councils
   - Military
   - Planning

2. **List of possible FMU stakeholders which DO NOT have responsibilities and/or a legal mandate in coastal fisheries or other coastal environment-related activities:**
   - Donors
   - International agencies
   - Traders’ associations
   - Commercial fishing companies

Trainer instruction: this checklist details possible threats and issues in the EAFM process. Not all of these threats and issues will be relevant to groups on the course, but many will be.

This checklist is only for the trainer. You can have a hard copy with you so you can refer to it during session. In Step 2.1 the trainer asks groups to revisit the threats and issues generated on Day 1, and to identify specifically the ones relevant to their group FMU. Participants can usually think of plenty of issues; the challenge is to ensure that they think broadly and include socio-economic and governance issues. Use the checklist to make suggestions.

NB. This list is a work in progress: trainers to keep adding to list.

Possible categories of issues to consider when planning and implementing an EAFM.

Ecosystem issues: ecological well-being	
Target species Bycatch species • Retained • Discarded Special species (protected species; vulnerable species) Targeting spawning aggregations Fish community structure • Trophic structure changes	Ecosystem/habitat • Habitat damage from fishing equipment • Water quality changes • Land-based impacts • Natural impacts (coral bleaching, earthquakes, storms, etc.) • Man-made impacts (dredging, sediment, sand mining, etc.)
Socio-economic issues: human well-being	
Fishers • Income • Safety and work-related injuries • Food • Well-being • Health Community • Employment • Food • Fees • Cost to alternative activities or opportunities • Social disputes – resource ownership, equity, benefits • Fuel, boats • Training • Cultural values and issues • Climate change • Natural disasters	Small-scale commercial sector • Income, profit • Work-related injuries • Shipping • Community relations • Fuel, supplies • Fees and licenses • Training • Market price variability • Demand fluctuations • Infrastructure National • Management capacity • Export income • License fees • National social and economic plans • Food security • Market forces • Development • Human migration and displacement

Governance *(ability to achieve)*	
Institutional Legal framework • National • Provincial/state • Local • Other Ineffective management plan Compliance Enforcement Monitoring and research does not aid management decisions Research Community leadership and structures Resources to manage at national, provincial and community levels • Staff capacity • Financial resources	Consultation • Community • Industry • Provinces/states • Interagency • NGOs Reporting Information and awareness Interagency cooperation and coordination Community - national agency cooperation *External factors (natural and human induced)* External drivers affecting governance (fisheries and non-fisheries sources) • Climate change impacts (bleaching, etc.) • Development (e.g. tourism related) • Market forces

Table adapted from "A community-based ecosystem approach to fisheries management: guidelines for Pacific Island Countries", Secretariat of the Pacific Community (SPC), 2010.

Example from Pacific Island Countries: issues with target species, fishing gear and methods that impact on coastal ecosystems in PICs.

Target species issues	**Impacts**
Selectively targeting a single species	Imbalance in food webs/ecosystems
Targeting spawning aggregations	Overexploitation, disrupted spawning, changes in sex ratios
Catching threatened/protected species	Further reduction in size of threatened populations
Targeting large individuals	Loss of large egg-bearing females, changes in sex ratios
Damaging gear and methods	**Impacts**
Explosives, commercial poisons, plant poisons	Collateral damage to corals and wider ecosystem
Intensive gleaning, fish drives	Physical damage to corals and wider ecosystem
Gear that makes contact with the sea floor	Habitat damage
Gear that requires setting by walking on reefs	Coral damage
Breaking corals to catch sheltering species	Collateral damage to corals
Overly efficient gear and methods	**Impacts**
Gill nets	Excessive catches and ghost fishing when lost
Seine nets	Excessive catches of schooling species
Barrier nets (set across passages and channels)	Excessive catches schooling species
Fence traps	Excessive catches, bycatch issues, ghost fishing
Scuba gear	Overexploitation of lobsters, trochus, sea cucumber
Fish traps	Habitat damage, bycatch species
Throw nets	Habitat damage, bycatch species
Underwater lights, night spear fishing	Devastation of large key reef species

***Trainer instruction*:** these role play scenario cards are for exploring conflict management. The skills practised during the role play include negotiating, questioning, listening, facilitating and mediation.

Before the session think how many participants will be in each of the four scenario groups for the role-plays. Ideally, all four scenarios could be played out; however, some may be more relevant to participants than others. Each group needs 2 to 3 participants in roles (a) and (b) (the two types of stakeholders in conflict) and one facilitator playing role (c) (fishery officer). The following pages contain guidance text for the four different scenarios. Print enough copies of each of the four scenarios (each participant gets a card with only the scenario and their role (either a, b, or c). Participants do not see the other roles in their same scenario.

Refer to session plan 12. for more detailed instructions and step-by-step guidance on how to run this role play.

Scenario 1 (Trainer copy)

Context: Artisanal fishing boundary of 5km from coastline is being infringed by commercial trawlers. Local fishers have limited gears, but trawlers have greater catch capacity and use this to their full advantage.
Conflict: Between small-scale artisanal fishers (from coastal communities) and commercial trawlers. Small-scale fishers feel they cannot compete; that their main source of income is being taken by others.
Roles:
a) *You are a representative of small-scale fishers/fisher cooperative* (men and women). You have formed a cooperative and rely on species X for income (both to supplement your diet and for income: the women dry/smoke/cure the fish and sell it to increase household income). Your community depends on this resource as there are not many options for agriculture/other income.
b) *You are a commercial trawler member* (not organised). You have commercial backing, greater resources and bigger vessels with more gear. You fish for profit and the more you can catch the better. You make full use of fuel subsidies. You sell the bycatch for fish meal for aquaculture.
c) *You are a district/provincial level fishery officer*. Within the current decentralized system, the fisher community and trawlers both come under your jurisdiction. As part of your role in fisheries management you need to bring different fishers together to resolve the dispute over key resources. The current conflict has escalated to violence (arson, fights) as well as some recent bad press in the local and national media.

Scenario 1

Context: Artisanal fishing boundary of 5km from coastline is being infringed by commercial trawlers. Local fishers have limited gears, but trawlers have greater catch capacity and use this to their full advantage.
Conflict: between small-scale artisanal fishers (from coastal communities) and commercial trawlers. Small-scale fishers feel they cannot compete; that their main source of income is being taken by others.
The parties in conflict have already met the mediator various times. They both trust the mediator, whom they believe can remain neutral.

Role:
a) *You are a representative of small-scale fishers/fisher cooperative* (men and women). You have formed a cooperative and rely on species X for income (both to supplement your diet and for income: the women dry/smoke/cure the fish and sell it to increase household income). Your community depends on this resource as there are not many options for agriculture/other income.
You need to talk with commercial trawler members and district/provincial level fishery officer.

Scenario 1

Context: Artisanal fishing boundary of 5km from coastline is being infringed by commercial trawlers. Local fishers have limited gears, but trawlers have greater catch capacity and use this to their full advantage.

Conflict: Between small-scale artisanal fishers (from coastal communities) and commercial trawlers. Small-scale fishers feel they cannot compete; that their main source of income is being taken by others.

The parties in conflict have already met the mediator various times. They both trust the mediator, whom they believe can remain neutral.

Role:

b) *You are a commercial trawler member* (not organised). You have commercial backing, greater resources and bigger vessels with more gear. You fish for profit and the more you can catch the better. You make full use of fuel subsidies. You sell the bycatch for fish meal for aquaculture.

You need to talk with representatives of small-scale fishers/fisher cooperative members and district/provincial level fishery officer.

Scenario 1

Context: Artisanal fishing boundary of 5km from coastline is being infringed by commercial trawlers. Local fishers have limited gears, but trawlers have greater catch capacity and use this to their full advantage.

Conflict: between small-scale artisanal fishers (from coastal communities) and commercial trawlers. Small-scale fishers feel they cannot compete; that their main source of income is being taken by others.

The parties in conflict have already met the mediator various times. They both trust the mediator, whom they believe can remain neutral.

Role:

c) *You are a district/provincial level fishery officer*. Within the current decentralized system, the fisher community and trawlers both come under your jurisdiction. As part of your role in fisheries management you need to bring different fishers together to resolve the dispute over key resources. The current conflict has escalated to violence (arson, fights) as well as some recent bad press in the local and national media.

You need to talk with representatives of small-scale fishers/fisher cooperative members and commercial trawler members.

Scenario 2 (Trainer copy)

Context: One defined geographical area is being fished by mixed gears (small-scale and bigger) with a fair degree of cooperation. All gears respect the seasonal ban on breeding grounds. However, there is a high incidence of IUU because trawlers from neighbouring provinces infringe this rule and fish in these breeding grounds.

Conflict: IUU from outsider intervention. Fishers from different geographical/spatial area fishing in locals' area.

The parties in conflict have already met the mediator various times. They both trust the mediator, whom they believe can remain neutral.

Roles:

a) *You are a representative of fisher cooperatives and trawl associations* who all fish within specific geographical/spatial area - their traditional area. The small-scale fishers keep closer to land; the trawlers fish further out and although there is no written agreement they each keep to their zones.

b) *You are a representative from fishing associations/cooperatives* from neighbouring province who are expanding and don't respect the seasonal ban. You claim that there has been a decrease in key fish species in your province (possible pollution) resulting in fishers needing to expand their area of fishing into neighbouring waters. There are no clear jurisdictions/legal agreements, so you feel you also have a right to fish in this area.

c) *You are a provincial level fishery officer.* The geographical/spatial area of dispute comes under your jurisdiction. As part of your role in fisheries management you need to resolve this conflict. The conflict has badly affected your agency's relationship with neighbouring provinces and the national level is requesting action.

Scenario 2

Context: One defined geographical area is being fished by mixed gears (small-scale and bigger) with a fair degree of cooperation. All gears respect the seasonal ban on breeding grounds. However, there is a high incidence of IUU because trawlers from neighbouring provinces infringe this rule and fish in these breeding grounds.

Conflict: IUU from outsider intervention. Fishers from different geographical/spatial area fishing in locals' area.

The parties in conflict have already met the mediator various times. They both trust the mediator, whom they believe can remain neutral.

Role:

a) *You are a representative of fisher cooperatives and trawl associations* who all fish within specific geographical/spatial area - their traditional area. The small-scale fishers keep closer to land; the trawlers fish further out and although there is no written agreement they each keep to their zones.

You need to talk to representatives from neighbouring fishing associations/cooperatives and provincial level fishery officer.

Scenario 2

Context: One defined geographical area is being fished by mixed gears (small-scale and bigger) with a fair degree of cooperation. All gears respect the seasonal ban on breeding grounds. However, there is a high incidence of IUU because trawlers from neighbouring provinces infringe this rule and fish in these breeding grounds.

Conflict: IUU from outsider intervention. Fishers from different geographical/spatial area fishing in locals' area.

The parties in conflict have already met the mediator various times. They both trust the mediator, whom they believe can remain neutral.

Role:

b) *You are a representative of fishing associations/cooperatives* from neighbouring province who are expanding and don't respect the seasonal ban. You claim that there has been a decrease in key fish species in your province (possible pollution) resulting in fishers needing to expand their area of fishing into neighbouring waters. There are no clear jurisdictions/legal agreements, so you feel you also have a right to fish in this area.

You need to talk to representatives of neighbouring fisher cooperatives and trawl associations and provincial level fishery officer.

Scenario 2

Context: One defined geographical area is being fished by mixed gears (small-scale and bigger) with a fair degree of cooperation. All gears respect the seasonal ban on breeding grounds. However, there is a high incidence of IUU because trawlers from neighbouring provinces infringe this rule and fish in these breeding grounds.

Conflict: IUU from outsider intervention. Fishers from different geographical/spatial area fishing in locals' area.

The parties in conflict have already met the mediator various times. They both trust the mediator, whom they believe can remain neutral.

Role:

c) *You are a provincial level fishery officer.* The geographical/spatial area of dispute comes under your jurisdiction. As part of your role in fisheries management you need to resolve this conflict. The conflict has badly affected your agency's relationship with neighbouring provinces and the national level is requesting action.

You need to talk to representatives of fisher cooperatives and trawl associations and representatives from neighbouring fishing associations/cooperatives.

Scenario 3 (Trainer copy)

Context: Environmental NGO advocating MPA and complete no-take zone, while local fishers have depended on this fishing ground and resource for generations and claim a traditional user right to it.

Conflict: conflict of interests e.g. conservationist agenda vs. resource user needs.

The parties in conflict have already met the mediator various times. They both trust the mediator, whom they believe can remain neutral.

Roles:

a) *You are a representative of local environmental NGO*. You have international donor backing, lots of funding, political influence, access to networks and media. Conservation scientists have data showing the negative effect of local fishing in the area. Strong demand for creation of MPA, or even a no-take zone to conserve biodiversity and allow regeneration of marine life. You really believe that resource X is in danger of extinction and that it needs to be completely protected. You also believe that your scientific data supporting this theory is more real and trustworthy and definitive than local people's knowledge. The NGO also has business backing from large tourist complex which is being built nearby; the hotel company is hoping that diving and a pristine marine environment will boost tourist numbers.

b) *You are men and women who traditionally harvest resources X/Y/Z* (fish/seaweed/ crustaceans, etc.). Your parents and their parents before them always relied on this resource; it is a mainstay for the economy and well-being of the local community (i.e. used as food, but also sold for income). You believe that resource X is not being overharvested. You certainly don't believe the environmental NGO representative and think they are scaremongering. You are critical of them as outsiders coming in and telling you how you should use resources you have always had a right to.

c) *You are a district/provincial level fishery officer*. The fisher community and the proposed MPA/no-take area come under your jurisdiction. As part of your role in fisheries management you want to bring the local fishers and the environmental NGO together to discuss ways forward. You are aware of both sides of the debate. You know that the fishers do not have a long-term perspective and do not see the "bigger picture", but you are equally aware that environmental concerns in the region are pushed by donor money.

Scenario 3

Context: Environmental NGO advocating MPA and complete no-take zone, while local fishers have depended on this fishing ground and resource for generations and claim a traditional user right to it.

Conflict: conflict of interests e.g. conservationist agenda vs. resource user needs.

The parties in conflict have already met the mediator various times. They both trust the mediator, whom they believe can remain neutral.

Roles:

a) *You are a representative of local environmental NGO*. You have international donor backing, lots of funding, political influence, access to networks and media. Conservation scientists have data showing the negative effect of local fishing in the area. Strong demand for creation of MPA, or even a no-take zone to conserve biodiversity and allow regeneration of marine life. You really believe that resource X is in danger of extinction and that it needs to be completely protected. You also believe that your scientific data supporting this theory is more real and trustworthy and definitive than local people's knowledge. The NGO also has business backing from large tourist complex which is being built nearby; the hotel company is hoping that diving and a pristine marine environment will boost tourist numbers.

You need to talk to men and women who traditionally harvest resources X/Y/Z and the district/provincial level fishery officer.

Scenario 3

Context: Environmental NGO advocating MPA and complete no-take zone, while local fishers have depended on this fishing ground and resource for generations and claim a traditional user right to it.

Conflict: conflict of interests e.g. conservationist agenda vs. resource user needs.

The parties in conflict have already met the mediator various times. They both trust the mediator, whom they believe can remain neutral.

Roles:

b) *You are men and women who traditionally harvest resources X/Y/Z* (fish/seaweed/crustaceans, etc.). Your parents and their parents before them always relied on this resource; it is a mainstay for the economy and well-being of the local community (i.e. used as food, but also sold for income). You believe that resource X is not being overharvested. You certainly don't believe the environmental NGO representative and think they are scaremongering. You are critical of them as outsiders coming in and telling you how you should use resources you have always had a right to.

You need to talk to a representative of the local environmental NGO and the district/provincial level fishery officer.

Scenario 3

Context: Environmental NGO advocating MPA and complete no-take zone, while local fishers have depended on this fishing ground and resource for generations and claim a traditional user right to it.

Conflict: conflict of interests e.g. conservationist agenda vs. resource user needs.

The parties in conflict have already met the mediator various times. They both trust the mediator, whom they believe can remain neutral.

Roles:

c) *You are a district/provincial level fishery officer*. The fisher community and the proposed MPA/no-take area come under your jurisdiction. As part of your role in fisheries management you want to bring the local fishers and the environmental NGO together to discuss ways forward. You are aware of both sides of the debate. You know that the fishers do not have a long-term perspective and do not see the "bigger picture", but you are equally aware that environmental concerns in the region are pushed by donor money.

You need to talk to a representative of the local environmental NGO and men and women who traditionally harvest resources X/Y/Z.

Scenario 4 (Trainer copy)

Context: Aquaculture (shrimp farming) is increasingly encroaching on traditional mangrove use. Outsiders with money are buying up land in mangrove areas, intensively farming shrimp with use of pesticides and relying on trash fish from trawler bycatch as the main source of fishmeal for shrimp feed. The shrimps are then exported worldwide.

Conflict: Between local mangrove users and shrimp farmers.

The parties in conflict have already met the mediator various times. They both trust the mediator, whom they believe can remain neutral.

Roles:

a) *You are a representative of the local mangrove users.* You have lived in the mangrove area for generations with other men, women and children. Mangroves are your livelihood. You use timber from mangroves to build your houses, produce wooden furniture, and for charcoal for fuel. You also use the land to grow fruit trees and subsistence crops. Your village has lived in a close relationship with the mangroves for as long as you can remember; the mangroves are part of your cultural heritage. You are very worried about the effect of pesticides from the shrimp farms, as well as the spread of 'white spot' a common disease which thrives on intensively-farmed shrimp in ponds. Local shrimp, which you eat as a regular part of your diet, are susceptible to white spot. Although you have no scientific proof, you know that when farmed shrimp are liable to flooding, they spill out into the wild waters and can infect local shrimp. In addition, you are concerned about water pollution from the aquaculture venture. The shrimp farms pump water from the estuary into their ponds, releasing the dirty water back into the estuary (full of nutrients, which in turn affects local fish species and causes algal bloom). You know that shrimp farms get their fish meal from trawlers' bycatch, so trawlers come close to the shore and want to catch as much as possible.

b) *You are a shrimp farmer*. You were born in the mangrove village, have been to college and have worked in different places. You want to improve the livelihood of your family and the community by trying out a more profitable option. You have backing by an external entrepreneur to finance this aquaculture enterprise; in fact you have gone into business with him. You are cutting down the mangroves at a fast rate as you know that other entrepreneurs may soon come to this area. In addition, you have invested capital into this venture and want to maximise you gain. You really believe that you can provide an alternative livelihood to the mangrove users; you have promised many of them jobs to work on the shrimp farm.

c) *You are a district/provincial level fishery officer*. Within the current decentralized system, the fisher mangrove community and shrimp farms both come under your jurisdiction. As part of your role in fisheries management you need to bring them together to resolve the dispute over key resources. The current conflict has escalated to violence (arson, fights) as well as some recent bad press in the local and national media.

Scenario 4

Context: Aquaculture shrimp farming is increasingly encroaching on traditional mangrove use. Outsiders with money are buying up land in mangrove areas, intensively farming shrimp with use of pesticides and relying on trash fish from trawler bycatch as the main source of fishmeal for shrimps. The shrimps are then exported worldwide.
Conflict: Between local mangrove users and shrimp farmers.
The parties in conflict have already met the mediator various times. They both trust the mediator, whom they believe can remain neutral.

Role:

a) *You are a representative of the local mangrove users.* You have lived in the mangrove area for generations with other men, women and children. Mangroves are your livelihood. You use timber from mangroves to build your houses, produce wooden furniture, and for charcoal for fuel. You also use the land to grow fruit trees and subsistence crops. Your village has lived in a close relationship with the mangroves for as long as you can remember; the mangroves are part of your cultural heritage. You are very worried about the effect of pesticides from the shrimp farms, as well as the spread of 'white spot' a common disease which thrives on intensively-farmed shrimp in ponds. Local shrimp, which you eat as a regular part of your diet, are susceptible to white spot. Although you have no scientific proof, you know that when farmed shrimp are liable to flooding, they spill out into the wild waters and can infect local shrimp. In addition, you are concerned about water pollution from the aquaculture venture. The shrimp farms pump water from the estuary into their ponds, releasing the dirty water back into the estuary (full of nutrients, which in turn affects local fish species and causes algal bloom). You know that shrimp farms get their fish meal from trawlers' bycatch, so trawlers come close to the shore and want to catch as much as possible.

You need to talk with the shrimp farmers and district/provincial level fishery officer.

Scenario 4

Context: Aquaculture shrimp farming is increasingly encroaching on traditional mangrove use. Outsiders with money are buying up land in mangrove areas, intensively farming shrimp with use of pesticides and relying on trash fish from trawler bycatch as the main source of fishmeal for shrimps. The shrimps are then exported worldwide.
Conflict: Between local mangrove users and shrimp farmers.
The parties in conflict have already met the mediator various times. They both trust the mediator, whom they believe can remain neutral.

b) *You are a shrimp farmer*. You were born in the mangrove village, have been to college and have worked in different places. You want to improve the livelihood of your family and the community by trying out a more profitable option. You have backing by an external entrepreneur to finance this aquaculture enterprise; in fact you have gone into business with him. You are cutting down the mangroves at a fast rate as you know that other entrepreneurs may soon come to this area. In addition, you have invested capital into this venture and want to maximise you gain. You really believe that you can provide an alternative livelihood to the mangrove users; you have promised many of them jobs to work on the shrimp farm.

You need to talk with representatives of the local mangrove users and district/provincial level fishery officer.

Scenario 4

Context: Aquaculture shrimp farming is increasingly encroaching on traditional mangrove use. Outsiders with money are buying up land in mangrove areas, intensively farming shrimp with use of pesticides and relying on trash fish from trawler bycatch as the main source of fishmeal for shrimps. The shrimps are then exported worldwide.
Conflict: Between local mangrove users and shrimp farmers.
The parties in conflict have already met the mediator various times. They both trust the mediator, whom they believe can remain neutral.

c) *You are a district/provincial level fishery officer.* Within the current decentralized system, the fisher mangrove community and shrimp farms both come under your jurisdiction. As part of your role in fisheries management you need to bring them together to resolve the dispute over key resources. The current conflict has escalated to violence (arson, fights) as well as some recent bad press in the local and national media.

You need to talk with representatives of the local mangrove users and the shrimp farmers.

Trainer instruction: Print a set of 7 blue headings strips and 12 black questions strips for each group. Shuffle each set, mixing the headings with the questions. Distribute a set to each group. Groups have to match questions to headings. See session plan for more details.

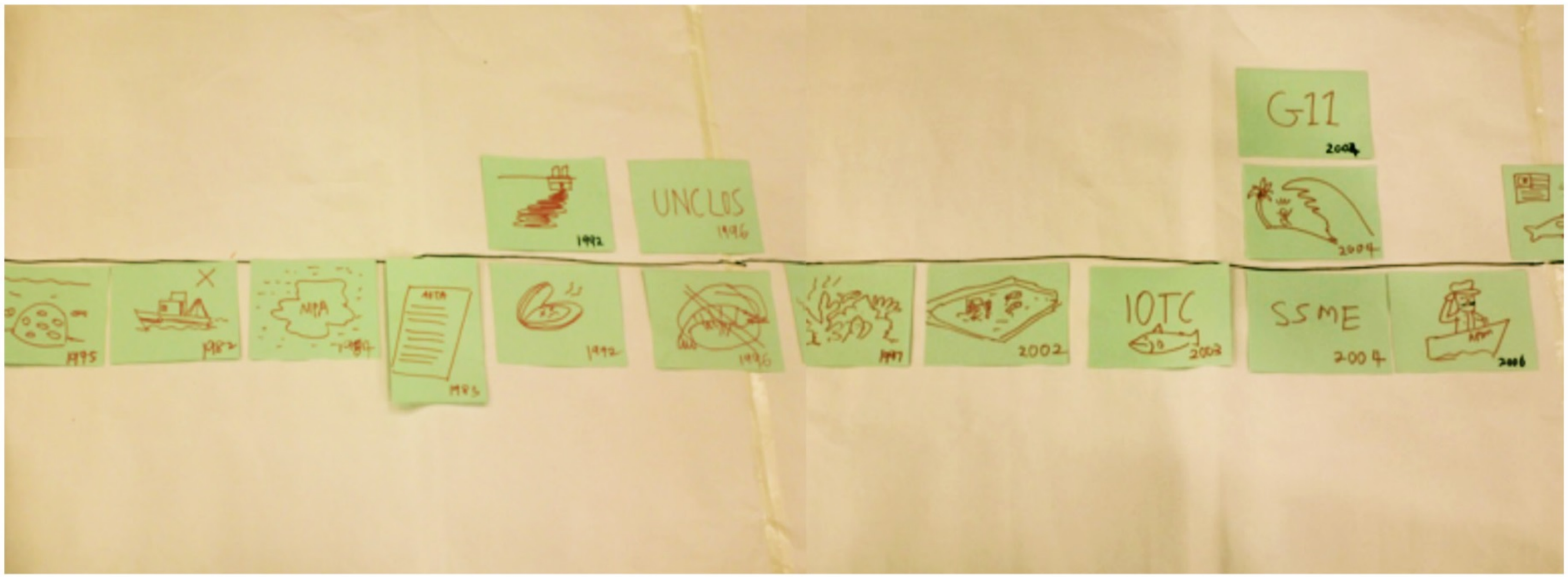
1. Governance
2. Appropriate scale
3. Increased participation
4. Multiple objectives
5. Cooperation and coordination
6. Adaptive management
7. Precautionary approach

Is there an adequate legal framework?
Are effective compliance and enforcement arrangements in place?
Are effective management institutions and arrangements sufficiently developed?
Is management at the appropriate ecological, social and governance scale?
Is co-management with relevant stakeholders working?

Have the different objectives for management been considered and trade-offs made?
Are nested institutions and resource user groups working?
Is cooperation, coordination and communication taking place?
Can the management system learn by doing and adapt accordingly?

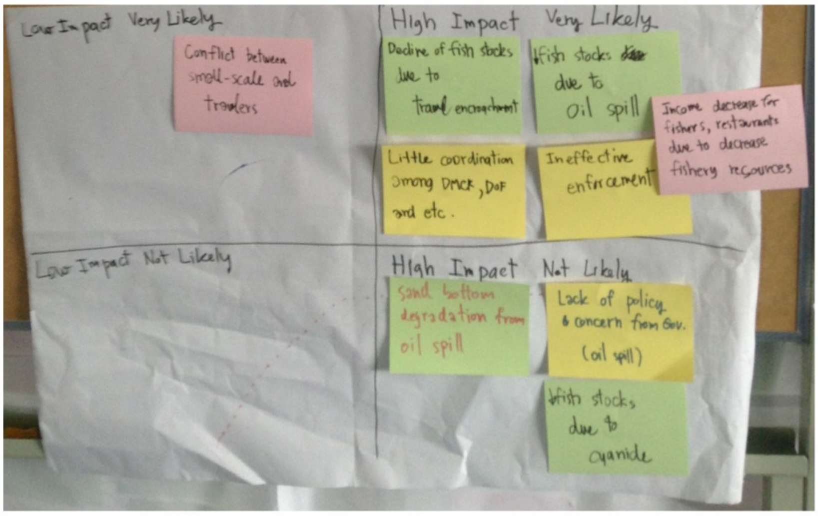
Are the results of the M&E being communicated and acted on by adapting the plan and subsequent management?
Has management commenced despite a lack of data and information?
Are management actions more conservative when there is greater uncertainty?

1. **Fishery timeline (Malaysia)**

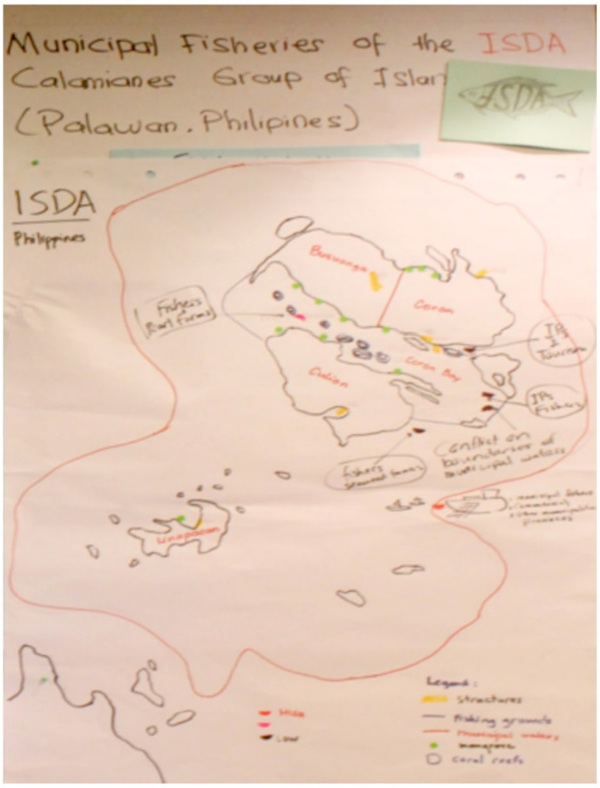


2. Venn diagram of FMU stakeholders

3. Venn diagram showing stakeholder linkages

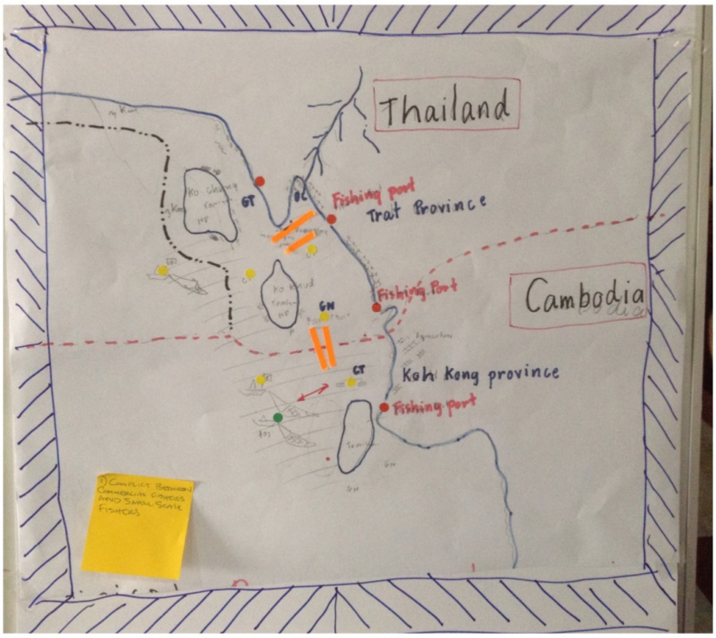


4. Stakeholder matrix



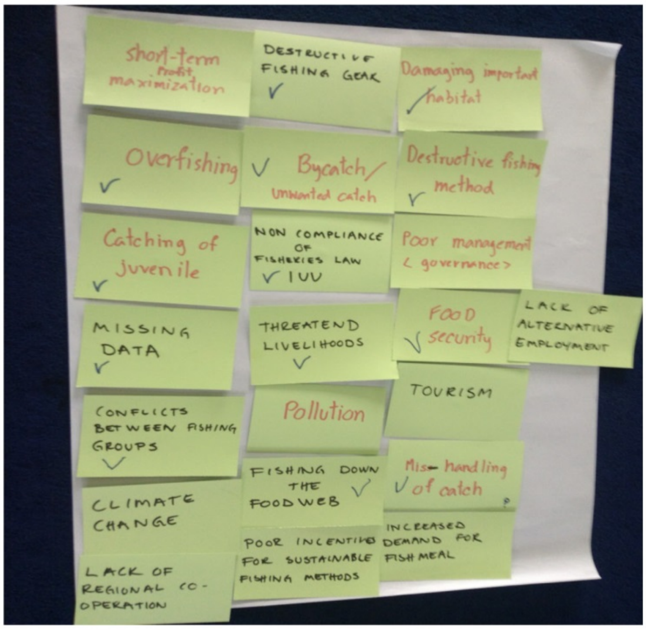
5. FMU map

6. FMU map



7. FMU map

8. Issues and threats to fisheries management



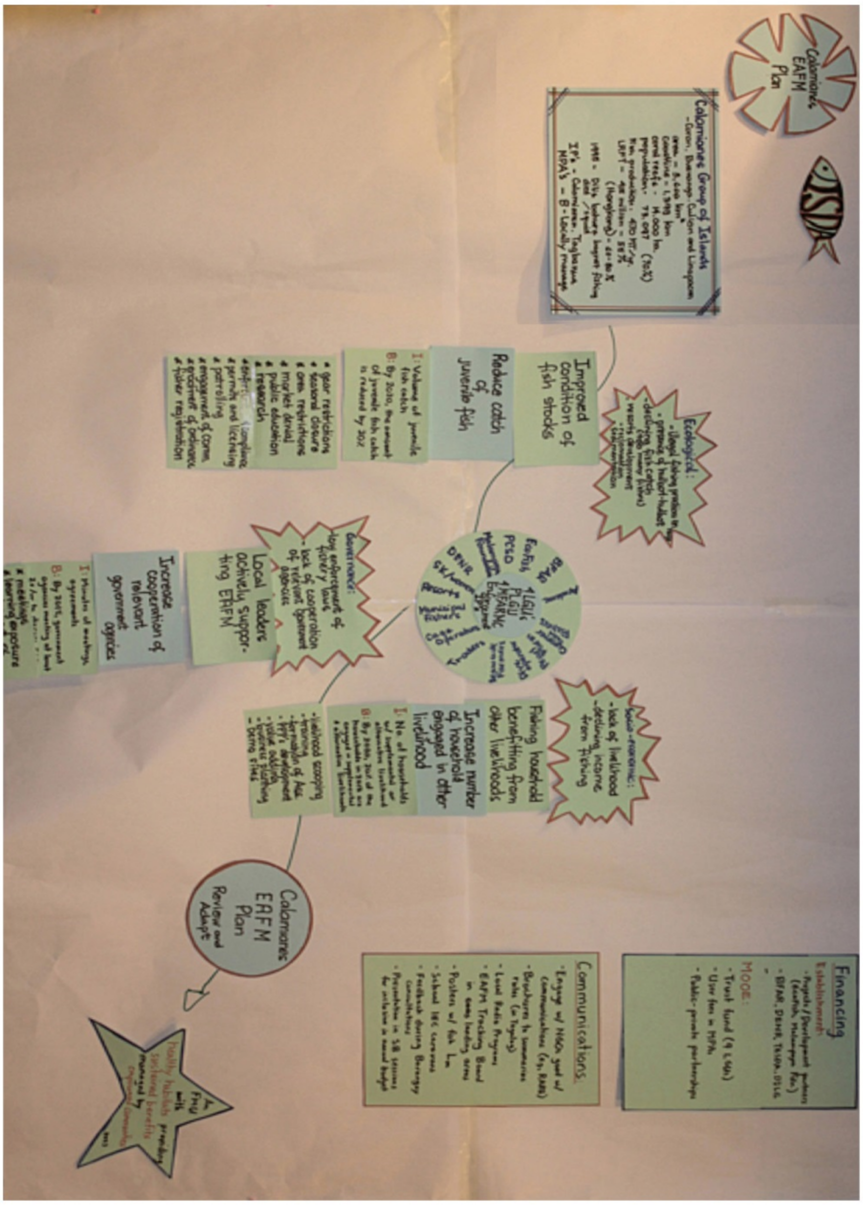
9. Issues and threats to fisheries management

10. Outputs for EAFM plan

11. Elements of draft EAFM plans

12. Elements of draft EAFM plans

13. Draft EAFM plan



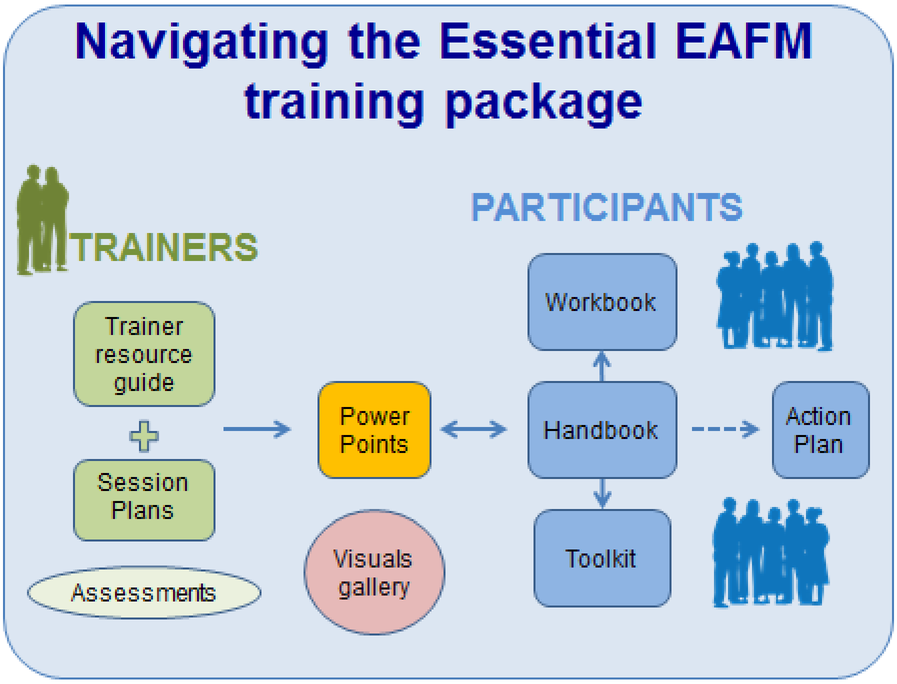
14. Building the EAFM Plan (Steps 1+3)

NB. In final version this diagram is slightly different; please refer to Power Point slides for exact elements.

Step1: Define and scope the FMU

Step 3.1-3.2 Develop objectives, indicators & benchmarks

Step 3.3 Agree management actions


Navigating the Essential EAFM training package
TRAINERS
PARTICIPANTS
Trainer resource guide
Session Plans
Assessments
Power Points
Visuals gallery
Workbook
Handbook
Toolkit
Action Plan