

# Action Research – WP9

Sustaining Ethical Aquaculture Trade  
Inception Workshop  
Hotel Novtel Rim Pae Rayong  
13–18<sup>th</sup> Jan 2010

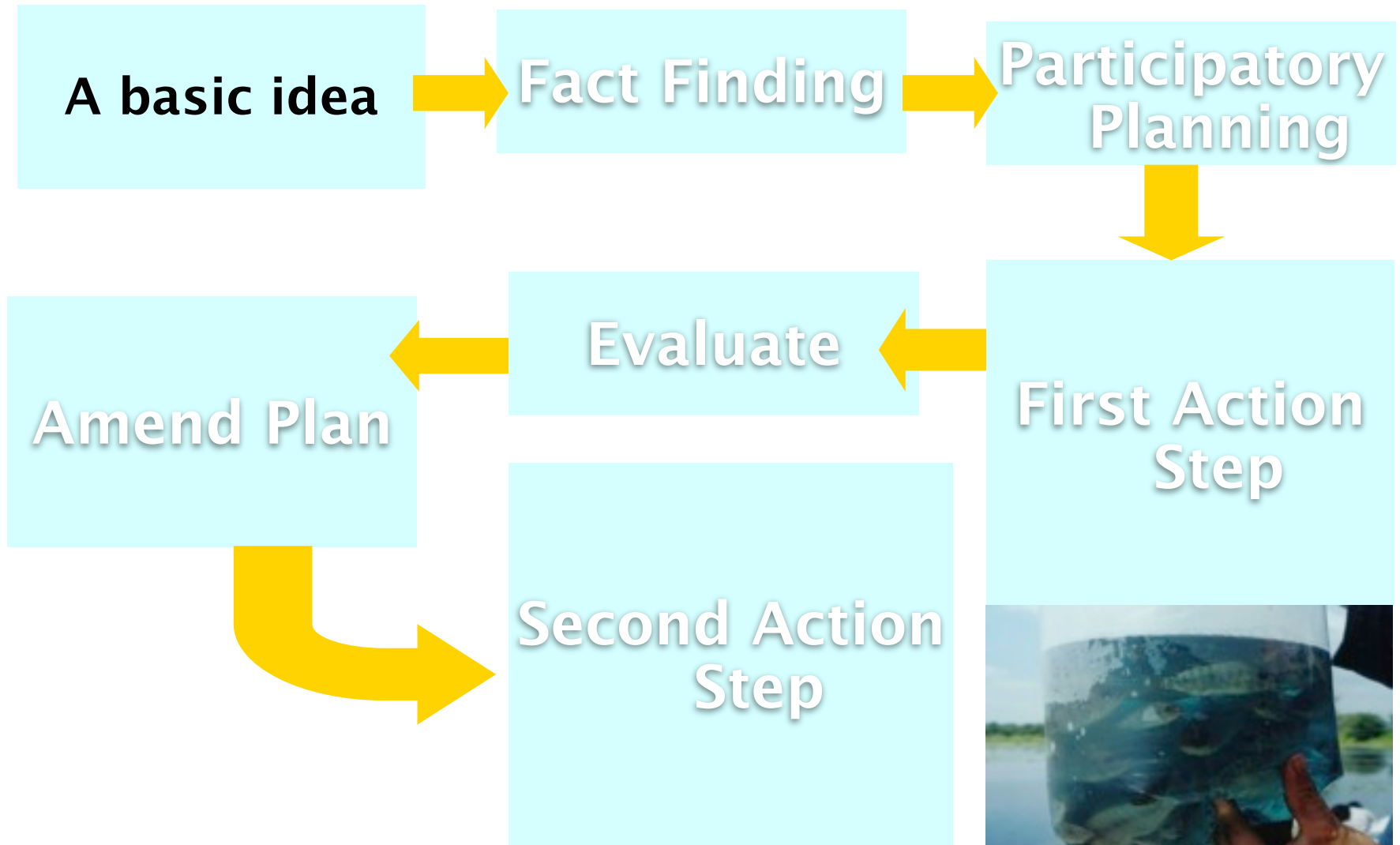
# Overview

1. WP objectives
2. What is action research
3. Micro, small and medium enterprises
3. Upgrading options for value chains
4. Horizontal impacts
5. SEAT activities in the Action Research process
6. Activity session – practicing action research

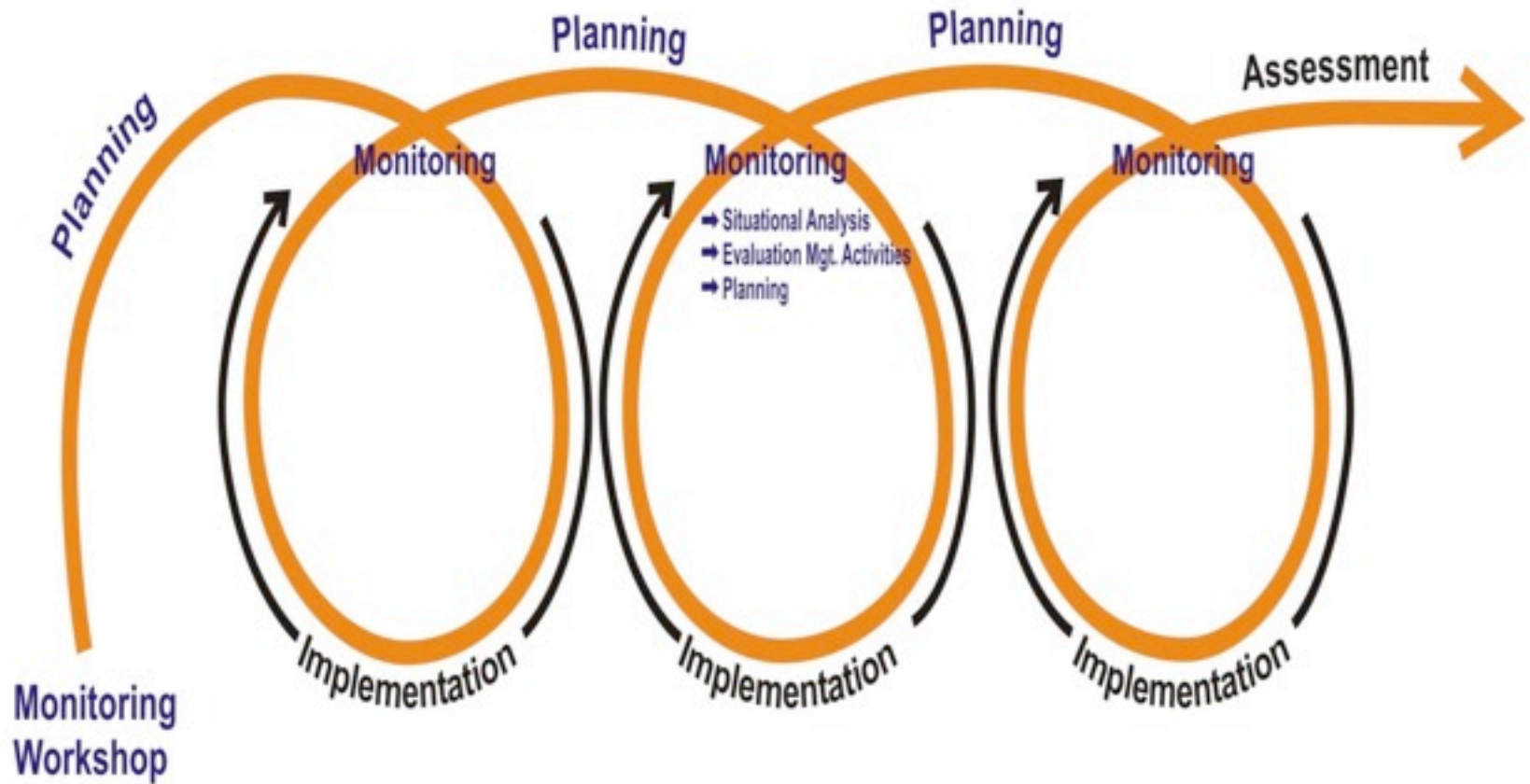
# WP9 Objectives

1. Increase value/sustainability of food production systems (MSMEs) through action research based on outcomes of other WPs
2. Assess outputs of WP3 to WP7 against WWF standards dialogue; adapt outputs for greater likelihood of adoption
3. Assess impact of ethical tools (WP8) EMA, EAFI on WWF dialogues; shrimp, tilapia, pangasius

# What is action Research



# Non-linear/ cyclical process - 'iteration'



# What are MSMEs?

- Micro, small and medium enterprises
- EU differentiate large, medium and small based on:
  - Financial turn-over > €1million?
  - Number of staff (<200 – 250 employees)
- Country and species-specific definitions?
- Commitment to work with 24: EU & Asia

# What is action research?

- Origins in **behavioral psychology** – iteration central to decision-making processes
- **Participatory**: stakeholders as co-researchers
- Emphasis on **learning by doing**
- **Adaptive change** – often incremental & cumulative (AKA **adaptive learning**)
- Real world situations – tackling specific **perceived problems**
- Researchers – **explicit bias** towards participants rather than detached objectivity of experimental method

# Five Stages in Action Research

## 1. Diagnosing:

- Identify problems (list and group)
- Stakeholder analysis
- Collect data for more detailed diagnosis

## 2. Action planning:

- Collective assessment of possible solutions
- Single plan selected for implementation

## 3. Taking action

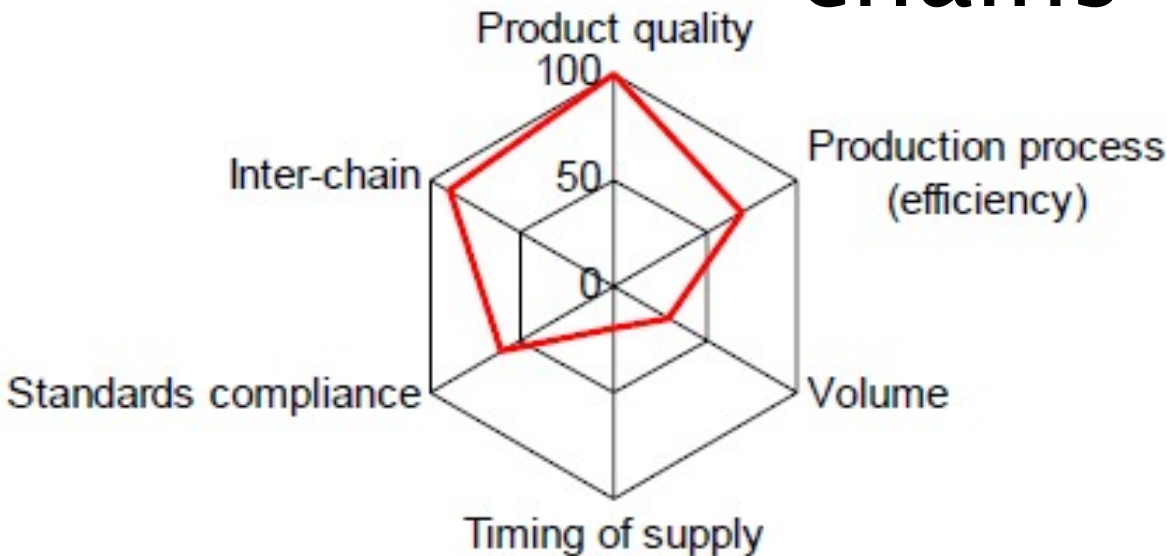
## 4. Monitoring and evaluating actions

## 5. Assess learning (success of outcome) and adapt plans to new situation

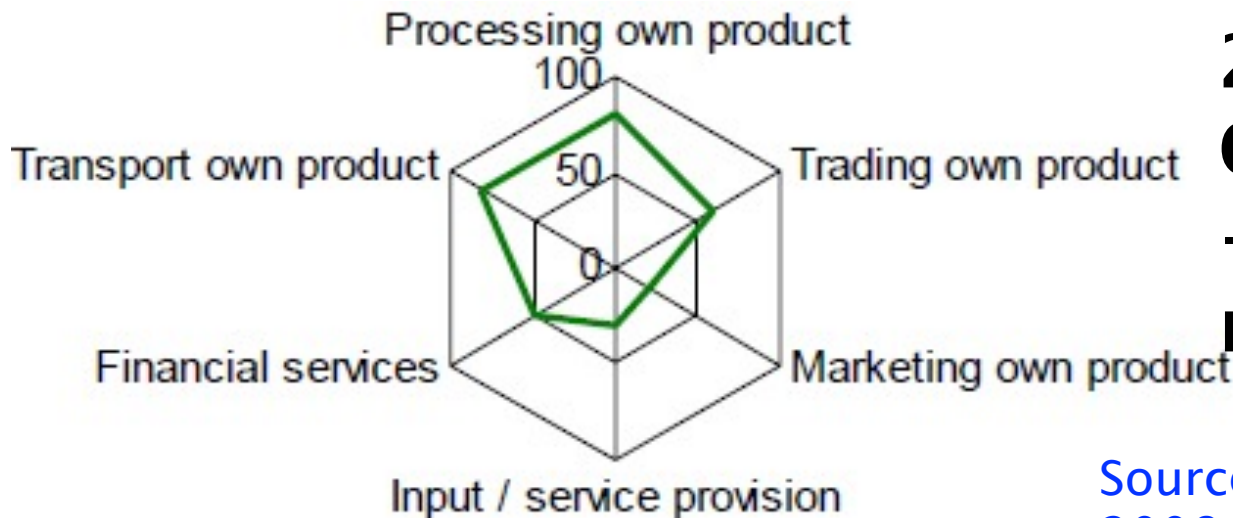
Repeat the cycle....



# 'Upgrading' strategies for value-chains



**1. Functional shift  
-at node**



**2. Coordination  
-between  
nodes**

# 1. Functional upgrading options

## A. 'bigger, better'

- Process: efficiency, ↓ negative externalities)
- Product:
  - Niche mkts: product differentiation, ↑ unit-value
  - Cost leadership: commodities, economies of scale yield per unit area, technology transfer
- Volume: - ↑yield, area

# Functional upgrading – continued

## B. Change or add functions

- Vertical integration: + upstream and/ or downstream functions
- Functional downgrading: to lower node(s)

# 2. Value chain coordination options

## A. Vertical contractualisation

- 2 actors, different nodes
- e.g. closer ties between farmer and retailer
- Benefits: harvest planning, mkt info, finance
- Problems: higher performance costs, certification etc

## B. Horizontal contractualisation

- Same actors, same node
- e.g. farmers co-operatives, trade associations
- benefits: input and marketing scale-economies, bargaining power
- certification of small-scale farmers?
- problems: traceability?

# Other considerations

- Which **stakeholders** need to be included?
  - Vertical and horizontal
- Continued participation v opting out?

## Horizontal impacts

- Implications for poverty, gender, environment
- e.g. GVCs as drivers of consolidation?
- Activities in
  - **WP2, WP5, WP8, WP10, WP11**
  - **Inc. WWF aquaculture dialogues**

# 5 Steps – corresponding SEAT activities?

## 1. Diagnosing (WP2 to WP12)

- WP2 Systems analysis inc. boundary setting
- WP2, WP8 Stakeholder analysis (ethical tools – value grps)
- WP2 LCA goal and scope setting
- WP2 Public health/ contaminant risks
- WP2 Review food safety inspection, lab analysis
- WP2 Policy structures & trade governance
- WP2 Sampling of MSMEs
- WP5 Mkt institutional analysis and equity outcomes
- WP7 Assessment of contaminant risks
- WP8 Assessment of market and public standards
- WP10 ICT review and critical points

# Corresponding Activities – Continued

## 2. Action planning:

- WP9: MSME stakeholder workshop
- WP9: Negotiation of IP between MSMEs and consortium
- WP2: State of the system (SoS) workshops
- WP5: Opportunities and threats to MSMEs

## 3. Taking action

- WP9 Initiate action research

## 4. Monitoring and evaluating

- WP9: Participatory impact monitoring (PIM), direct observation, surveys

## 5. Assess

- WP9 Interim (6mnth) action research workshop

1–2 cycles of iteration

# Other Action Research Activities?

Criteria: Implementing change, iteration etc

**WP9** Evaluation of WWF against EMA, EAFI

**WP9** Evaluation of LCA and other tools  
(WP7–12) by WWF dialogue stakeholders

**WP6:** Case studies of occupational health hazards

**WP10** Capacity building for ICT end-users

**WP12** Exploitation dissemination tools with MSMEs



# Activity Session – Practicing Action Research



# Example scenario

- **Step1 – Diagnostic findings**
  - WP5: Periodic yellow flesh colour – reduces fillet value – possible rejections by processors
  - WP2: Attributed to interactions between diet, infection and pond water quality
  - WP4&7: Increasing frequency of pond water exchange can reduce severity of the problem
- **Research Question**
  - How can the problem be addressed to benefit defined stakeholders?

## Step 2 – collective assessment

- list & group interventions
- Identify best option(s)

- **Hatcheries:** hybrid varieties (e.g. Claresse – Fishion/ Anova, Netherlands)
- **Producers, feed and pharmaceutical companies:** experiment with flushing frequency, diet composition, diagnostic capacity etc
- **Processors, plant suppliers, retailers:** Electro–static smoking process (low yield loss – added value)
- **Consumers, retailers:** Yellow flesh as an ethical food option?

# Next steps

- Step 3 – Suggest implementation plan
- Step 4 – Suggest monitoring & evaluation strategy
- N/A Step5 – Assess learning outcomes

# Scenario 1 – Bangladesh/ Prawns

- Scoping findings

- W6: serious microbiological contamination in product from 3 of 20 processors sampled
- WP5: Small-scale trader networks supply numerous (small) local plants from pond-sides throughout the day
- WP5: Women heavily reliant on processing labour
- WP5: EU veterinary inspection scheduled in 6 months

- Research questions

- How likely is the risk/ significance of a ban?
- how can benefits to defined stakeholder groups be secured?

# Scenario 2 – Thailand/Shrimp

- **Scoping findings**
- WP2: 85 of 100 farmers surveyed were certified under Thai GAP (Good Aquaculture Practice) Standard (whole of chain, Antibiotics residues, sanitary practices, environmental controls)
- WP5: only 5 kept written records
- WP7: No effluent treatment, high levels of residues in silt of receiving canals
- WP5: High transaction costs for compliance – low premium to producers for GAP certified product
- **Research question**
- How can the benefits of certification be improved?

# Scenario 3 – Vietnam/ Pangasius

- **Scoping findings**
- WP2: Survival quartiles 65–75% (fingerling to harvest)
- WP5: Many smaller farmers ceasing production
- WP2: Controlled trials indicate dip vaccine offers good protection against main bacterial pathogen
- WP6: Many farmers use prophylactic anti-biotic treatments – only a few larger farmers with good diagnostic capacity are using the vaccine
- **Research question**
- What steps can be taken to reduce loss levels?

# Scenario 4 – China/Tilapia

- **Scoping findings**

- WP2: A recent tilapia consignment rejected by US authorities – antibiotic residues detected
- WP6: Local consumers found to have higher levels of sickness

- **Research question**

- What steps can be taken to resolve the situation?



# Action Research Activity

1. **Develop the scenarios** into a credible case study based on groups 'background' knowledge
2. **Develop action research agenda** through first iteration phase (5 steps)
  - Identify key stakeholders (inc. local & EU MSMEs)
  - Identify timeline for action (e.g. considering seasonality of production, markets etc.)

# Ref: A strategic framework and toolbox for action research with small producers in value chains

Risgard, Bolwig, Ponte, Du Toit, Helwig 2008

