



Food and Agriculture  
Organization of the  
United Nations

FMM/RAS/298: Strengthening capacities, policies and national action plans on  
prudent and responsible use of antimicrobials in fisheries Workshop 2  
in cooperation with Malaysia Department of Fisheries and INFOFISH

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# Best practices for shrimp aquaculture

Working group 2





PRODUCTION  
CYCLE STAGE

Broodstock

SPECIFIC HAZARD

info from group  
let farmer know  
about advantages and  
disadvantages

SPF/SPR/SP  
STOCKS

Live Feed

Pathogens  
carrier

Supply/  
Source

Alternative  
to  
live feed

Home grown/  
domestic

HEALTH STATUS  
SPF

PREVENTATIVE  
MEASURES

Validation of preventive  
measures

BIOSECURITY  
MEASURES

HUSBANDRY/FARM  
MANAGEMENT

GROUP  
2

CA APPROVED SOURCE/  
ACCREDITATION OF  
SUPPLIER

Health  
Certificate

ENSURE  
HEALTH  
STATUS OF  
FARM

AUDIT

SAMPLING  
&  
ANALYSIS

Quarantine  
measures

PL quality  
criteria

Farm Standard  
(GAP, BAP)

Disinfected  
Water

Disease  
Occurrence

GAP handling  
Artemia

GOOD QUALITY  
PL/  
PICKNETS

TECHNICAL  
ASSISTANCE

Small Scale Farm  
Biosecurity

Farmer Organization  
(cluster of farmer  
for small scale)

Prudent use of  
Antimicrobial

Vehicle

Vectors

water discharge

waste disposal

inform cluster  
members

information about  
proper disposal  
of waste & dead  
fish

Farmer should have  
production goal/  
target

record keeping  
SOP

Indicator of  
good production

- Survival Rate  
- Uniformity in size  
- appearance

GAP

let the hatchery  
know responsible  
use of am.

COA /  
SQA CA Approved  
&  
Registered

coming  
inventory

ENVIRONMENTAL  
CHANGES

technical  
assistance

training

Diseases recognition  
card/manual &  
poster / flyer

WATER  
QUALITY  
(contaminations)  
invasive  
Plant / Fish

swimmers, campaign  
through IEC  
materials

use of chemical  
drug

FEED  
QUALITY

Feed Quality  
separable from  
source of feed

NO TESTING

Disease  
Risk

PL Quality

Diseases

Problem in timely  
Disease recognition

Sampling Procedures  
Submission of  
representative sample

Storage  
Health challenges  
during culture

Sanitizing  
water

HATCHERY

NURSERY

GROW-OUT

Post-Larvae

Nauplii

## Identified action points for IEC materials

| Production cycle stage | Type         | Specific hazard                                   | Actions                                                                    |
|------------------------|--------------|---------------------------------------------------|----------------------------------------------------------------------------|
| Broodstock             | Imported SPF | Assurance from source                             |                                                                            |
|                        | Homegrown    | Disease risk                                      | Let the former know the difference between SPF and non-SPF                 |
| Hatchery               |              | Use of antimicrobials during the production cycle | Emphasize responsible use of antimicrobials among hatchery operators       |
| Nursery / Grow-out     |              | Timely disease recognition                        | Shrimp health management during culture                                    |
|                        |              | Wastewater disposal                               | Information material about proper disposal of waste and dead / sick shrimp |

THANK YOU VERY MUCH

