

Small-Scale Marine Fisheries - A Training Manual (Peace Corps, 1983, 631 p.)



(introduction...)



Small-scale marine fisheries: An Extension Training Manual



Week 1: Orientation



(introduction...)



Session 1: Orientation: welcome to training



Session 2: Country overview



Session 3: Volunteer's aspirations re: Peace Corps Service and information filtering



Session 4: Feedback and journal writing



Session 5: Cross-cultural workbook (part I)



(introduction...)



Approaching living in a new culture: A workbook for cross-cultural transition



(introduction...)



Acknowledgements



Contents



Purposes and uses of workbook























Section 1: Historical encounters






















Section 2: Learnings from childhood


























Section 3. Past experience in one culture-personal needs and the task of satisfying old needs in new ways






















-  **Section 4: Leaving our own culture effectively**
-  **Section 5: Responding to a new culture**
-  **Section 6: Identifying to your cross-cultural learning needs**
-  **Session 6: Role of the volunteer in development work (rvdw): the helping relationship as a volunteer**
-  **Session 7: Individual interviews**
-  **Session 8 Volunteer in development and change**
-  **Session 9: Nutrition**
-  **Session 10: The volunteer and technical assistance**
-  **Session 11: Introduction to the cultural environment/Overview of field placements**
-  **Session 12: Seamanship/personal floatation devices**
-  **Week 2: Orientation**
 -  **(introduction...)**
 -  **Session 13: Field placement**
 -  **Session 14: Processing of field placement**
-  **Week 2: Training**
 -  **Session T-1: Introduction to technical training**
 -  **Session T-2: The oceans, rivers, streams of the world an overview of world wide fisheries**
 -  **Session T-3: Special projects**
 -  **Session T-4: Introduction to nets**
 -  **Session T-5: Non-verbal communication**





















-  **Session T-6: Introduction to net construction and repair**
-  **Session T-7: Introduction to outboard engines**
-  **Session T-9: Values clarification**
-  **Session T-10: Outboard engine trouble shooting**
-  **Session T-11: Tropical photography - extension**
- **Week 3: Training**
 -  ***(introduction...)***
 -  **Session T-12: Introduction to diesel engines**
 -  **Session T-13: Knots, net sewing and construction small-scale fishing gill nets**
 -  **Session T-14: Coping skills**
 -  **Session T-15: Diesel power systems; Diesel trouble shooting**
 -  **Session T-16: Special group project gardening, composting and small animal raising**

 -  **Session T-17: Introduction to extension**
 -  **Session T-18: Outboard/diesel field trip**
 -  **Session T-19: Diesel and outboard maintenance schedules, fuels and costs special group project**
 -  **Session T-20: Volunteer's role as an extensionist**
 -  **Session T-21: Introduction to small-scale fishing**
 -  **Session T-22: Trolling for spanish mackeral - special group project; Anatomy of hook - special project**
 -  **Session T-23: Extension III - Extension of extension by an extensionist**
 -  **Alternate session T-23: Marine fisheries extension**

-  **Session T-24: Small-scale fishing**
-  **Session T-25: Individual interviews/net mending**
-  **Session T-26: Communication through illustration special group project**
-  **Session T-27: Small scale fishing appropriate fishing technology II New Zealand long-line reel**
-  **Session T-28 Special group project cooking fish and nutrition**
- Week 4: Training**
 -  **(introduction...)**
 -  **Session T-29: Introduction to fish handling and care - I**
 -  **Session T-30: Fish processing and presentation special project - filleting**
 -  **Session T-31: Community analysis introduction**
 -  **Session T-32: Fish handling and care II**
 -  **Session T-33: Fish processing and preservation water filtration systems special project**
 -  **Session T-34: Community analysis - Part II**
 -  **Session T-35: Fish handling and care III - Cleaning and processing on the fishing boat**
 -  **Session T-36: Weather for the mariner special project**
 -  **Session T-37: Community analysis - part III interview skills - spatial relationships**
 -  **Session T-38: Introduction to fish preservation**
 -  **Session T-39: Ice box construction - special group project**
 -  **Session T-40: Problem analysis**
 -  **Session T-41: Fish silage - Special project**

-  **Session T-42: First aid afloat**
-  **Session T-43: Exploratory fishing trip I - Preparation**
-  **Session T-44: Individual interviews/net mending**
-  **Session T-45: Star charting special project**
-  **Session T-46: Navigation and seamanship**
- Week 5: Training**
 -  ***(introduction...)***
 -  **Session T-48: Small-scale fishing - fishing trip assessment**
 -  **Session T-49: Salt making - special group project**
 -  **Session T-50: Tropical sea birds special project**
 -  **Session T-51: Poisonous and toxic fish - special project**
 -  **Session T-52: Audiovisual and lesson plans**
 -  **Session T-53: Salt making industry: field trip**
 -  **Session T-54: Corrosion control special project**
 -  **Session T-56: Solar fish drying**
 -  **Session T-57: Fish smoker special project**
 -  **Session T-58: Charcoal making special project**
 -  **Session T-59: Metric system special project**
 -  **Session T-60: Team building**
 -  **Session T-61: Introduction to basic refrigeration and ice making with field trip**
 -  **Session T-62: Individual interviews and net mending**
 -  **Session T-63: Support systems**
 -  **Session T-64: Processing field trip**
 -  **Session T-65: Special project - seaweed farming**

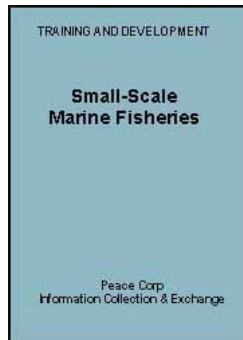
-  **Session T-66: Culinary skills and fish nutrition special group project**
- **Week 6: Training**
 -  **(introduction...)**
 -  **Session T-67: Introduction to boat repair, maintenance and construction**
 -  **Session T-68: Blueprint reading special project**
 -  **Session T-69: Color depth charts special project**
 -  **Session T-70: Working with groups as an extension worker**
 -  **Session T-71: Navigation and seamanship - electronics**
 -  **Session T-72: Fish aggregating devices (fad) special project**
 -  **Session T-73: Anchoring techniques special project**
 -  **Session T-74: Project planning - goal setting**
 -  **Session T-75: Boat repair, construction and maintenance II**
 -  **Session T-76: Construction of scarf joint special project**
 -  **Session T-77: Women in development - part I**
 -  **Session T-78: Boat repair, construction and maintenance III**
 -  **Session T-79: Fiberglass techniques special project**
 -  **Session T-80: Women in development - part II**
 -  **Session T-81: Fish economics and marketing/fish marketing survey - special group project**
 -  **Session T-82: Small-scale fishing trip II, preparation**
 -  **Session T-83: Interviews/net mending**
 -  **Session T-84: Navigation and seamanship II**
 -  **Session T-85: Small-scale fishing trip II**




- **Week 7: Training**
 -  **(introduction...)**
 -  **Session T-86: Introduction to fisheries economics and marketing**
 -  **Session T-87: "Gyotaku" fish art special project**
 -  **Session T-88: Fund raising - special group project**
 -  **Session T-89: Economic data sheets**
 -  **Session T-90: Transportation systems - special project**
 -  **Session T-91: Fish cooperatives special group project**
 -  **Session T-92: Simple accounting techniques**
 -  **Session T-93: Reef survey preparation**
 -  **Session T-94: Artificial reefs and floating tire breakwaters - special project**
 -  **Session T-95: Resources/proposal writing**
 -  **Session T-96: Reef survey**
 -  **Session T-97: Interviews**
 -  **Session T-98: Fish issues - special group project**
 -  **Session T-99: Ecology and conservation - special group project**
 -  **Session T-100: Report writing**
- **Week 8: Training**
 -  **(introduction...)**
 -  **Session T-101: Alternative energy forms special group project**
 -  **Session T-102: Water heater special project**
 -  **Session T-103: Wellness**

-  **Session T-104: Professional approaches to interaction with host country officials**
-  **Session T-105: Fisheries statistics**
-  **Session T-106: Country specific slides**
-  **Session T-107: Aquaculture special project and field trip**
-  **Session T-108: Culture shock**
-  **Session T-109: Final interviews**
-  **Session T-110: Training closure**
-  **Session T-111: Graduation ceremony**



[Home](#) > [ar](#).[cn](#).[de](#).[en](#).[es](#).[fr](#).[id](#).[it](#).[ph](#).[po](#).[ru](#).[sw](#)



-  **Small-Scale Marine Fisheries - A Training Manual (Peace Corps, 1983, 631 p.)**
- ➔  **(introduction...)**
-  **Small-scale marine fisheries: An Extension Training Manual**
- Week 1: Orientation**
- Week 2: Orientation**
- Week 2: Training**
- Week 3: Training**
- Week 4: Training**
- Week 5: Training**
- Week 6: Training**
- Week 7: Training**
- Week 8: Training**

A Training Manual

TRAINING FOR DEVELOPMENT Peace Corps

INFORMATION COLLECTION & EXCHANGE TRAINING MANUAL NO. T-24

INFORMATION COLLECTION & EXCHANGE

Peace Corps' Information Collection and Exchange (ICE) was established so that the strategies and technologies developed by Peace Corps Volunteers, their co-workers, and their counterparts could be made available to the wide range of development organizations and individual workers who might find them useful. Training guides, curricula, lesson plans, project reports, manuals and other Peace Corps- generated materials developed in the field are collected and reviewed. Some are reprinted "as is"; others provide a source of field based information for the production of manuals or for research in particular program areas. Materials that you submit to the Information Collection & Exchange thus become part of the Peace Corps' larger contribution to development.

Information about ICE publications and services is available through:

The Peace Corps Internet Web Site address:

<http://www.peacecorps.gov>

Please note the new Peace Corps Mailing Address from July 1998 on is:

ICE/ Peace Corps

1111 20th Street N.W.
Washington, DC 20526
USA

Add your experience to the ICE Resource Center. Send materials that you've prepared so that we can share them with others working in the development field. Your technical insights serve as the basis for the generation of ICE manuals, reprints and resource packets, and also ensure that ICE is providing the most updated, innovative problem-solving techniques and information available to you and your fellow development workers.

SMALL-SCALE MARINE FISHERIES: An Extension Training Manual

**This Publication Was Produced For PEACE CORPS
By the TECHNOS CORPORATION San Juan, Puerto Rico**

**Printed By: PEACE CORPS Information Collection and Exchange
April 1983 September 1984**



[Home](#) > [ar](#) [cn](#) [de](#) [en](#) [es](#) [fr](#) [id](#) [it](#) [ph](#) [po](#) [ru](#) [sw](#)

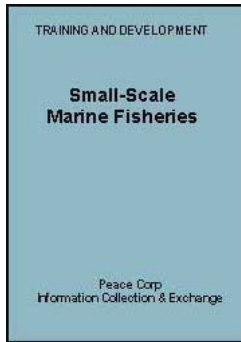
 **Small-Scale Marine Fisheries - A Training Manual (Peace Corps, 1983, 631 p.)**













➔ **Week 7: Training**

 **(introduction...)**

 **Session T-86: Introduction to fisheries economics and marketing**

 **Session T-87: "Gyotaku" fish art special project**



-  **Session T-88: Fund raising - special group project**
- Session T-89: Economic data sheets**
-  **Session T-90: Transportation systems - special project**
-  **Session T-91: Fish cooperatives special group project**
-  **Session T-92: Simple accounting techniques**
-  **Session T-93: Reef survey preparation**
-  **Session T-94: Artificial reefs and floating tire breakwaters - special project**
-  **Session T-95: Resources/proposal writing**
-  **Session T-96: Reef survey**
-  **Session T-97: Interviews**
-  **Session T-98: Fish issues - special group project**
-  **Session T-99: Ecology and conservation - special group project**
-  **Session T-100: Report writing**

Small-Scale Marine Fisheries - A Training Manual (Peace Corps, 1983, 631 p.)

Week 7: Training

WEEK <u>7</u>		SESSIONS <u>86</u>		THRU <u>100</u>		
MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
AM Session T-86 7:30 AM Introduction to Fisheries Economics and Marketing	Session T-89 7:30 AM Economic Data Sheets Session T-90 10 AM SP	Session T-92 7:30 AM Simple Accounting Techniques Session T-93 8:30 AM	Session T-96 6 AM Reef Survey	Session T-97 7:30 AM Interviews	Free Day	Free Day

	Transportation Systems	Reef Survey Preparation			
PM Session T-87 4 PM SP Syotaku Fish Art	Session T-91 4 PM SGP Fish Cooperatives	Session T-94 4 PM SP Artificial Reefs/ Floating Tine Breakwaters		Session T-98 1 PM SGP Fish Issues Session T-99 2:30 PM SGP Ecology and Conservation	
EVE Session T-88 7:30 PM SGP Fund Raising		Session T-95 7:30 PM Resources/ Proposal Writing		Session T-100 7:30 PM Report Writing	

Week 7, Sessions 86 Thru 100

Session T-86: Introduction to fisheries economics and marketing

Time: 7:30 AM

Goals:

- **For trainees to become aware of the various economic activities in which small-scale fishermen are involved**
- **To bring the individual volunteer's role as a development worker into perspective**
- **For trainees to become knowledgeable of the basic components in the decision-making process and procedures necessary to make a sound decision**

Overview:

This session begins by explaining the basic economic concepts fishermen must contend with in their daily lives. Possible solutions are brought out, and the role of the fisheries extensionist as an agent of change is discussed. The decision making apparatus is explored, and its economic relationship to the fishermen is discussed - as well as the logical five-step process to better decision making.

Exercises:

- 1. Fishery Economics/Economic Activities:**
 - a. definitions of economic activities (see appendix 1);**
 - b. natural fisheries (see appendix 2);**
 - c. economic treadmill (see appendix 3).**
- 2. Development Role Play**
- 3. Decision-Making in Fishery Economics**

Materials:

- **flip chart, markers, handouts, Appendix 1, 2, 3**

Trainer's Note:

We felt it was important to keep the human perspective when dealing with economics. We kept in mind that trainees would be transferring basic economic/marketing skills to people who would not be impressed with flow charts, graphs or analysis tables.

References:

- **The Fisherman's Business Guide Smith, Fred. Oregon State University Press. Corvallis, Oregon 97331**

EXERCISE 1 - Fishery Economic Activities

Total Time: 2 Hours Goal 5

- **To give definitions of economic activities**
- **To help trainees understand basic concepts of economics**

Overview:

In this session trainees are exposed to the basic concepts of fish economics. The general economic condition of small-scale fishermen is the focus.

Materials:

- **flip charts, markers, tape, Appendix 1, 2, and 3 drawn on flip chart paper**

Procedures

Time	Activities
-------------	-------------------

15 Minutes	1. Talk on economic activities (using flip chart drawing of appendix 1)
	a. definition of economics
	b. production and services
	c. consuming and using
	d. costs of production, market availability
10 Minutes	2. Natural Fisheries. Technical trainer uses flip chart drawing of appendix 2, and covers the following topics:
	a. artisinal
	b. industrial
	c. needs of artisinal fisheries development
	d. cash income for increased standard of living; production of protein
10 Minutes	3. Technical trainer now asks trainees for questions they may have. Points out that this is a western economic concept. Asks trainees how they think these concepts may be in conflict with cultures they are going to work in Trainer lists replies on newsprint.
15 Minutes	4. Technical trainer now continues with Economic Treadmill using appendix 3 drawn on flip chart paper.
	a. what is a treadmill - beast of burden inside going nowhere
	b. artisinal fishermen are caught up in an economic treadmill benefiting others more than themselves
	c. fish merchant prospers
	d. ice plant owner prospers
	e. engine Salesmen prosper
	f. fuel agent prospers

	g. fishermen stay the same, remain at bottom of social scale in terms of income, housing, education, health care
	h. money advanced by merchants or money lenders to keep boat, gear, in repair
	i. interest rate is so high, by the time money is repaid for a loan, fishermen need another loan to carry them through
	Trainer points out that once western economics/marketing, fishing technology and equipment are Introduced to developing countries, western economic problems are introduced at the same time.
10 Minutes	5. Technical trainer returns to newsprint of conflicts generated during step 3. Given these conflicts and the economic realities presented in step 4, what are the possible solutions to the dilemma?
10 Minutes	6. Technical trainer responds to solutions on news print and goes into the following:
	Role of Fisheries Extensionist
	a. cooperative marketing
	b. injection of credit with easier repayment
	schedules
	c. improvement on productivity
	d. improved catch quality
10 Minutes	7. Trainees are asked to list on paper how they, as fisheries extensionists, envision becoming part of the solution.
35 Minutes	8. The trainees now form into small groups, share their lists, and on flip chart paper list what they think are the most feasible solutions that an extensionist can be part of. These are presented to larger group.
5	9. Technical trainer responds to small group presentations. and leads into next exercise.

APPENDIX 1: FISHERY ECONOMICS

Introduction

Economic Activity

Every person has his own definition for Economics:

Economics affects our everyday life in many ways; what we eat, where we live, where we work, what we do in our spare time.

All these above examples are economic activity.

Any act of producing or servicing a product is an economic activity:

Fish farming, building, teaching.

In the same way any act of consuming or using a service is an economic activity: Buying, transporting, learning.

We can now see that fishing, fish farming, transporting fish, buying fish, are all economic activities.

In Economics we look at the costs of production and availability of markets.

NATURAL FISHERIES

In Natural Fisheries we look at two levels of fishing:

A. Artisanal i.e. low scale

B. Industrial i.e. large scale

- here bigger boats, more crews and sophisticated gear are used

We will concentrate on artisanal fisheries since they need extension work.

There are two kinds of artisanal fisheries:

(a) Subsistence Fishing - only interested in catching fish for the pot

(b) Commercial Fishing - concerned with earning income

Just like in other types of fishing there are subsistence fishermen and commercial fishermen and we must try to encourage more subsistence fishermen to become commercial fishermen so they will (1) earn a higher income and gain a better standard of living and (2) produce valuable protein which will improve the health of the whole population.

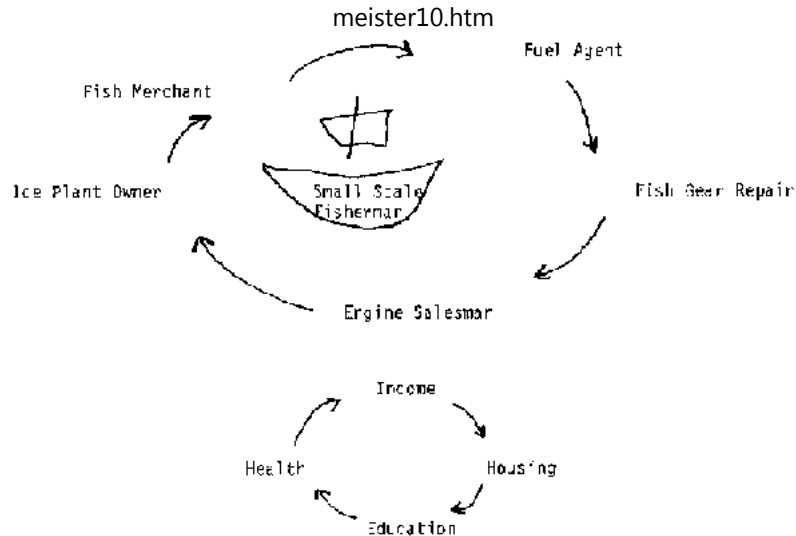
So for both fishermen and fish farmers it is important to encourage the motivation for a higher income.

All of us want to exchange something we produce with other items to consume. This is very difficult. We cannot say how many bags of rice are worth a pair of shoes.

Therefore we use money. Our money is dollars and cents. We sell fish for \$15.00. We buy a pair of shoes.

Economists look at fish mainly as a food product. Fish is popular because it tastes good, it gives plenty of protein, it normally is cheaper than meat. All these points make up the demand for fish.

APPENDIX 3



Economic treadmill

EXERCISE 2 - Development Role Play

Total Time: 1 1/2 Hours

Goals:

- **To introduce different points of view about development**
- **For trainees to envision possible frustrations they will have as a PCV**
- **For trainees to conceptualize different strategies that could be used in development work**

Overview:

In this exercise trainees try to conceptualize their role as a PCV, the possible frustrations

that could arise around economic issues, and strategies that they could employ to overcome resistance to development.

Materials:

- flip charts, markers, Development Story

Trainer's Note:

Immediately after Exercise 1, trainer asks for two volunteers to do a role play for this exercise. The two volunteers are given 15 minutes to prepare before exercise starts.

Procedures

Time	Activities
15 Minutes	1. Trainees present role play.
15 Minutes	2. Trainer asks the following questions posted on newsprint:
	a. What would you have done differently?
	b. What was the development worker really trying to do?
20 Minutes	3. Trainees break into two or three groups and prepare their own role plays based on previous discussion. (role plays 5 to 8 minutes)
20 Minutes	4. Trainees present skits.
3 Minutes	5. Trainer processes each skit.
15	6. Trainer asks if trainees can envision frustrations they might have as development

Minutes U. Trainer asks if trainees can envision illustrations they might have as development workers. Trainer has trainees get in touch with the feelings that were generated during role play. Lists the feelings on newsprint.

DEVELOPMENT STORY

There is the old story about a fisheries expert with an international development organization who was extremely keen to promote increased fish production and improve the economic status of subsistence fishermen. He was walking the beach on a South Pacific atoll one calm, sunny morning when he came across an islander sitting under a palm tree, obviously relaxing and letting the world go by. There was a fine looking small runabout with an outboard motor anchored a short way offshore so the expert struck up a conversation that went something like this:

"Good morning. Is that your runabout out there?"

"Good morning. Yes it is."

"Do much fishing with it?"

"Not too much. Only what I need for the family and to sell a few fish to pay for petrol."

"Well look here. I know a village a couple of miles down the coast that is always short of fish so there is a good market, and if I were you I'd go into fishing full time to satisfy that market."

"Why should I? I really don't have to fish full time."

"But man, look what you could do for your family with some extra cash. You could buy them better clothing, some luxury items, provide your children with better education - there's really no limit on what you could do to improve your standard of living."

"O.K. Suppose the money does start coming in and my standard of living improves, what happens then?"

"Well, in time you could probably afford a larger boat and spend more time catching fish, and perhaps employ some of your people to fish with you."

"Alright. What happens then?"

"Well, after more time you will probably pay off the boat, start a savings account, and eventually you will be able to enjoy a comfortable retirement."

"So what do you think I'm enjoying now?"

At the risk of committing heresy, one would be less than honest not to admit that there are times when the islander's philosophy is much more appealing than our own.

EXERCISE 3 - Decision-Making in Fishery Economics Total Time: 1 Hour

Goals:

- **To make trainees aware that decision-making is an important part of business management**
- **For trainees to understand the procedures in making a logical decision; the five-step process**

Overview:

Trainees as extensionists, will have to present data to help others make decisions. They need to be clear about their own participation in this decision-making process.

Materials:

- flip chart, markers

Procedures:

Time	Activities	
10 Minutes	1. Trainer makes opening remarks	a. What is decision-making?
	and asks the following questions:	b. How does it work?
		c. Is decision-making a necessity in a fishing environment?
	Trainees respond to questions and discuss premises.	
10 Minutes	2. Technical trainer presents the	a. make observation and obtain ideas
	following five steps in decision-	b. analyze your observations
	making:	c. make the decision - yes or no
		d. take action
		e. accept responsibility
25 Minutes	3. Trainees break into small groups and come up with a process by which they can work with fishermen to use the five steps in decision-making. They list process on newsprint and present to large group.	
10 Minutes	4. Trainer comments on each presentation, pointing out areas that are clearly working with someone and areas that are doing something for someone. It must be clear that local fishermen must make their own decisions.	
5 Minutes	5. Trainer wraps up session by talking	a. the fisherman as a businessman
	briefly about:	b. fishing as a business

		c. decisions which face a businessman
--	--	---------------------------------------

Link to future session.

Session T-87: "Gyotaku" fish art special project

Time: 4 PM

Goals:

- For trainees to learn the step-by-step process of Gyotaku, or Japanese fish art
- For trainees to think about ways of income generation for fishing families, i.e. arts and crafts
- For trainee assigned this project to be able to transfer skills and technology to others

Overview:

This session is a special project. Trainee presents this project as an income generating technique which can be passed on to fishing families, women's groups, youth groups and fishing associations.

Procedures

Time	Activities	
2 Hours	1. Trainee gives brief history of Gyotaku.	
	2. Trainee demonstrates	a. wipe all excess moisture from the fish, using paper towels
	Gyotaku	b. clear the gills and the anus of any residue, and stuff cotton into the anus

	techniques as	
	follows:	c. set the fins so that they will be clearly defined in the print; do this by inserting pins at the base of the spines until they are erect (you'll have to poke around for the right spot)
		d. apply the paint (or speed ball ink) to the fish, making sure it isn't too runny
		e. place the paper lightly on the fish letting it adhere to the fish (if the paper wrinkles to the touch it has absorbed too much)
		f. remove the paper very carefully so that it does not tear one fish can produce many prints. Gyotaku can be used on T-shirts as well as paper.

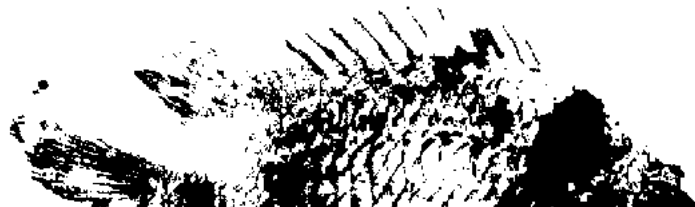
Materials:

• **Flip chart, markers, several fish of various sizes, ink (speed ball is best), alcohol, cotton, long pins, cloth/paper towels**

Trainer's Note:

During pilot program we had trainees make graduation invitations during this session.

3. Trainees now all try their hand at producing Gyotaku prints.





*Usted está cordialmente invitado
para asistir la graduación ceremonial
de la
U.S. Peace Corps
Marine Fisheries Training Program
en la Asociación de Pescador en Puerto Real
La ceremonia sera
el Domingo 21 de Noviembre 1982
a las 2:00 p.m.
Gracias*

Gyotaku fish

Session T-88: Fund raising - special group project

Time: 7:30 PM

Goals:

- **To introduce possible fund raising ventures applicable to those countries where trainees will be working**
- **To provide opportunity for trainees assigned to the special group project to build on communication technology transfer skills**

Overview:

This session is done as a special group project by trainees. The SPG leader researches and presents as many forms of fund raising/income generating projects as possible. The importance of locally-raised funds is emphasized, since outside money is not regarded as belonging to the community; "ownership" of a project may be questioned. Fund raising of entirely local money may take much longer than ever anticipated, but the project would then be by the community - for the community.

Materials:

- **flip chart, markers**

Procedures:

Time	Activities	
30 Minutes	1. Trainee leader gives orientation	a. traditional income generation
	to fund raising:	b. non-traditional income generation
		c. women, youth, fishing groups d. cultural considerations e. other

15 Minutes	2. Trainees brainstorm various income generation/fund raising activities. Group leader makes list on newsprint.
30 Minutes	3. Trainees present various schemes for fund raising, using props or visual aids.

Session T-89: Economic data sheets

Time: 7:30 AM

Goals:

- **For trainees to become acquainted with a profit analysis format that they will be able to use when working with small-scale fishermen**

Overview:

In this session trainees become conversant with Marine Economic Data Sheets and their purposes.

Materials:

- **Marine Economic Data Sheet, flip chart, markers**

Procedures:

Time	Activities
30 Minutes	1. Technical trainer introduces Marine Economic Data
	Sheet using following outline:

	What are Marine Economic Data Sheets?	
	a. MEDS are single-sheet summaries of costs and returns for different types of marine businesses - commercial fishing, boatyards, charter fishing and marinas.	
	MEDS have these purposes:	
	a. to illustrate a proper profit-analysis procedure that can be used in a fishing business	
	b. to provide costs and returns data for comparison with other fishermen's costs and returns	
	c. as an indicator of potential profitability in a marine business	
	Presentation of sample chart on newsprint (see appendix 1)	
	a. explanation of each section:	
	- boat, equipment and fishery	
	- gross returns	
	- variable costs	
	- fixed costs	
	- opportunity costs operator labor and management	
	- opportunity costs total business involvement	
	- return to operators labor, management and total investment	
	- return to operators labor and management	
	- return to total investment	
	- net cash available	
15 Minutes	2. Discussion of sample MEDS	a. How could it be modified for use in developing countries.
		b. Would this information be useful to small-scale fishermen

30 Minutes	3. Trainees are now broken into small groups of 3-4 and asked to develop their "own" MEDS, one which they perceive would be beneficial in-country. They will report back to the large group.
20 Minutes	4. Trainee groups present "low-tech" MEDS to entire group. Technical trainer comments about points brought out and possible points missed.
30 Minutes	5. Technical trainer now extracts key elements from each groups MEDS and "builds" a low-tech model which all trainees have an interest in.
10 Minutes	6. Wrap-up by technical trainer. Trainees are asked to write down finished MEDS.

APPENDIX I

ASTORIA SALMON GILLNET FISHING BUSINESS

Boat

30 feet by 10 feet, fiberglass hull, \$33,000 market value, 330 hp gasoline engine.

Equipment

Hydraulic net reel, 7 floating nets, 2 diving nets, CB, fathometer.

Fishery a/

54 days fishing coho and chinook salmon, production of 7 tons (14,000 pounds) at an average price of \$2,820 per ton (\$1.41 per pound).

Gross Returns	
Salmon	\$19,740

(1) Total gross returns	\$19,740
Variable Costs b/Boat and engineer repair	\$800
Gear repair	\$6,616
Fuel	\$1,936
Transportation	\$980
Food	\$1,170
(2) Total variable costs	\$11,502
Fixed Costs c/Insurance	\$500
Depreciation	\$1,650
Drift rights maintenance	\$825
Licenses	\$220
Union dues	\$110
Miscellaneous	\$348
(3) Total fixed costs	\$3,653

Understanding and Using Marine Economics Data Sheets

This report explains the purpose and use of Marine Economics Data Sheets. The explanation begins at the right and continues on page 4. Pages 2 and 3 illustrate both sides of a Marine Economics Data Sheet and describe its parts.

by Frederick J. Smith Extension Marine Economist Oregon State University

**Oregon State University
Extension Marine Advisory Program
A Land Grant / Sea Grant Cooperative**

Special Report 500 November 19



Capt Mark is a Charleston shrimp boat, similar to the one described in Marine Economics Data Sheet SR 500-20, shown and explained on pages 2 and 3.

What are Marine Economics Data Sheets?

Marine Economics Data Sheets (MEDS) are single-sheet summaries of costs and returns for different types of marine businesses - commercial fishing, charter fishing, marinas, and

boatyards. MEDS have been a service of Oregon State University's Extensio Marine Advisory Program since April 1969. All MEDS have a similar format and general plan, even though the costs and returns vary considerably.

MEDS have these purposes:

- to illustrate a profit-analysis procedure that you can use in your own business;**
- to provide costs and returns data for comparison with your own costs and returns;**
- and**
- to indicate the potential profitability of different marine businesses.**

Is the information accurate?

The National Marine Fisheries Service and various universities have conducted studies of "sample" marine businesses. Some MEDS use the results of these studies. Most MEDS are based on studies conducted by the Marine Advisory Program staff, especially for the purpose of developing MEDS.

From three to six local marine business managers are selected on the basis of their knowledge, success and similarity among their businesses A MAP staff person then interviews the group, obtaining a consensus on each of the items the planned MEDS will illustrate. These and other marine business managers then review draft. of the MEDS to verify accuracy.

Data developed in this manner represent only the business involved. However, since the marine business managers participating in the studies are usually more successful than the average, MEDS usually represent an above-average marine business in all aspects.

For each MEDS, the data source is indicated in a footnote

1. Boat, equipment, and fishery

Each MEDS gives first the physical description and market value of business equipment and property. Depending on the nature of the marine business, volume of sales, and production, this item also provides effort expended and expected prices.

2. Gross returns

This is the total value of all goods and services sold, before any deductions.

3. Variable costs

These include all costs that vary as the volume of the business varies. The value of unpaid family labor [excluding the operator] is included, as is the net cost of labor (crew). Some costs, such as equipment and repair, may not vary exactly with the volume of business but are included under the "Variable costs" category for simplicity.

4. Fixed costs

These are all costs that remain constant, regardless of the volume of business. Interest on any debt is not included in this category as it is considered under item 7, "Opportunity costs: Total investment."

5. Opportunity costs:

Operator labor and management

This is the estimated value of the operator's time, or the amount the operator could have earned managing and working in another, similar business. The manager gives up this salary because it is the manager's own business. Therefore, it is an opportunity cost.

6. Opportunity costs:**Total business investment**

This is the estimated fair return (interest) to the total investment, regardless of actual debt.

Oregon State University
Extension Service

**Marine
Economics
Data
Sheet**

SR 500-20

Charleston Shrimp and Crab Fishing BusinessBoat

52 feet by 15 feet, wood hull, \$125,000 market value, 220 hp diesel engine.

Equipment

Hydraulic crab block, two net reels, 250 crab pots, five shrimp nets, auxiliary engine, automatic pilot, loran, radar, VHF, CB, single sideband radio, fathometer and recording fathometer.

Fishery^{a/}

70 days fishing dungeness crab, production of 50 tons (100,000 pounds) at an average price of \$1,100 per ton (\$.55 per pound).

110 days fishing shrimp, production of 250 tons

1

(500,000 pounds) at an average price of \$460 per ton (\$.23 per pound).

2	<u>Gross Returns</u>	Dungeness crab.....	\$ 55,000
		Shrimp.....	115,000
		(1) Total gross returns.....	\$170,000
3	<u>Variable Costs</u> ^{b/}	Boat and engine repair.....	\$ 1,200
		Gear repair.....	3,060
		Fuel.....	4,200
		Food.....	1,225
		Ice.....	3,300
		Bait.....	2,750
		Crewshare ^{c/}	51,000
		(2) Total variable costs.....	\$ 66,735
4	<u>Fixed Costs</u> ^{d/}	Insurance.....	\$ 3,800
		Depreciation.....	4,000
		Interest on operating capital ^{e/}	1,067
		Moorage.....	285
		Licenses.....	210
		Dues and fees.....	2,325
		Miscellaneous.....	620
		(3) Total fixed costs.....	\$ 12,307



A Sea Grant Marine Advisory Project

Extension Service, Oregon State University, Corvallis. Henry A. Wadsworth, director. This publication was produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U.S. Department of Agriculture, and Oregon counties. Extension's Marine Advisory Program is supported in part by the Sea Grant Program, National Oceanic and Atmospheric Administration, U.S. Department of Commerce. Extension invites participation in its activities and offers them equally to all persons without discrimination.

Marine Economic Data Sheet SR 500 20 (Front)

7. Return to operator's labor, management, and total investment

This is what the owner/operator earned for the time, skill, risk, decision-making, and money invested in the business. All costs have been covered except costs of the operator's labor, management, and total investment.

8. Return to operator's labor and management

This is what the operator earned for the time, skill, risk, and decision-making he invested in the business. All costs (including opportunity costs of total business investment) except the operator's labor and management have been covered.

9. Return to total Investment

This is what the total investment earned in the business. All costs except the opportunity cost of investment have been covered This can be compared with item 6 above "Opportunity costs: Total business investment," in measuring the financial success of this business.

10. Net cash available for personal outlays and debt service

Depreciation and interest are added back to "Return to operator's labor, management, and total investment," as calculated above (item 7). This is not a measure of profitability but a measure of this business' ability to meet cash needs.

11. Footnotes

These explain the technicalities of some of the costs, and they provide other necessary supporting information.

<u>Opportunity Costs</u> ^{1/}	(4) Operator's labor and management (30% of gross).....	\$ 34,000
	(5) Total business investment (10% of \$125,000).....	\$ 12,500
<u>Analysis</u>	Return to operator's labor, management and total investment (1 less 2 and 3)....	\$ 90,958
	Return to operator's labor and manage- ment (1 less 2, 3 and 5).....	\$ 78,458
	(\$436/fishing day)	
	Return to total investment (1 less 2, 3 and 4).....	\$ 39,958
	(32%)	
	Net cash available for personal outlays and debt service (return to labor, manage- ment and investment, plus depreciation and interest on operating capital).....	\$ 96,025

Developed by the Oregon State University Marine Advisory Program in cooperation with selected Charleston fishermen, November 1977. These data represent only the boat, equipment and fishery described.

-
- ^{a/} These data represent only the 1977 crab and shrimp season. Fishing days, production and prices vary from season to season and directly affect the financial success of the fishing business.
- ^{b/} Costs that generally vary with fishing effort.
- ^{c/} Two crew members each receive 15% of gross returns for fishing, gear repairs, vessel repairs and other services.
- ^{d/} Costs that generally do not vary with fishing effort.
- ^{e/} Interest on operating capital is the average interest paid on cash

5
6
7
8
9
10
11

costs incurred during that portion of the year during which no fishing took place.

f/ Opportunity costs represent a fair value of the operator's labor, management and investment. The opportunity cost of labor and management is the percentage of gross returns this operator could have earned as a hired skipper and manager. The opportunity cost of investment is the interest that could be earned if the business had been sold to someone else.

Charleston Shrimp and Crab Fishing Business (Back)

Now do you use your MEDS?

Study the breakdown of the sample MEDS provided on pages 2 and 3 of this report. Note the organization o' costs and returns. Note, too, that this arrangement is not appropriate for tax reporting or crew settlement.

Once familiar with the way MEDS work, you will find it useful to develop similar information and analysis of your own marine business. This new information and the MEDS can be used in the following way:

1. Compare your costs with those shown on the MEDS. Are some of yours too high?

2. Take your costs and returns data, and the MEDS, to your lender. Can you get better credit terms?

3. Use your costs and the MEDS to determine "break-even" prices.

4. Use MEDS to project profit or loss for a new boat, new fishery, etc.

MAP is here to help you

Your Extension marine agent can provide further assistance, and he will usually have other publications that will be useful to you.

There are four Extension marine advisory offices on the Oregon coast (listed here from north to south):

Astoria 97103 Clatsop County Extension Office Post Office (P.O. Box 207) phone: (503) 325-7441, ext. 50

Tillamook 97141 Tillamook County Extension Office Courthouse phone: (503) 842-5511, ext. 372

Newport 97365 Lincoln County Extension Office Courthouse (225 W. Olive) phone: (503) 265-5376

Coquille 97423 Coos County Extension Office 290 N. Central phone: (503) 396-3121, ext. 242

SR 500 is a revision of SG 24, November 1973, by the same author.

Extension Service, Oregon State University, Corvallis, Henry A. Wadsworth, director. This publication was produced and distributed in furtherance of the Acts of Congress of May 8

and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U.S. Department of Agriculture, and Oregon counties. Extension's Marine Advisory Program is supported in part by the Sea Grant Program, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

Extension invites participation in its activities and offers them equally to all people, without discrimination.

Session T-90: Transportation systems - special project

Time: 10 AM

Coals:

- **To acquaint trainees with different transportation systems and the problems associated with them in developing countries**
- **For trainees to develop strategies for alleviating transportation bottlenecks, particularly those affecting the marketing of food produce from rural areas to population centers**
- **For the trainee assigned the special project to build on communication/technology-transfer skills**

Overview:

One of the major problems that marine fisheries extensionists will face in their programs are transportation bottlenecks which hinder the flow of fish (fresh, smoked, dried) to markets. In some cases, PCV's may need to lay the ground work by identifying middlemen to transport fish from rural areas to population centers (i.e. taxi drivers, truckers, etc.); PCVs may also need to seek out inland markets with potential demand for processed fish.

In this session, trainees look at their role as catalysts in boosting outside demand for their communities' fish products.

Materials:

- flip charts, markers, tape

Procedures:

Time	Activities
10 Minutes	1. Trainee assigned the special project delivers a short lecture on the importance of good transportation systems for the successful marketing of quality fish products.
40 Minutes	2. Trainee acts as facilitator and divides the large group into groups of four or five. Each group is assigned a transportation system, either land or water. The small groups identify problem areas within each system, and possible solutions. Groups report out to the large group. Trainee turns session over to technical trainer.
15 Minutes	3. Trainer processes the group report outs, drawing on own personal experiences and knowledge of transportation and marketing problems in developing countries, Trainer emphasizes the volunteer's role as a catalyst in boosting outside demand for their communities' fish products.
5 Minutes	4. Trainer draws closure to the session, linking back to the extension and community analysis sessions.

Trainer's Note:

For a large training group, it may be better for the trainee assigned the special project to write up specific land or water problems for each group, and have the group identify possible solutions.

Session T-91: Fish cooperatives special group project

Time: 4 PM

Goals:

- To become familiar with cooperatives
- To become familiar with the functions of a cooperative
- To become familiar with the organizational prerequisites of a cooperative

Overview:

This session is to be done as a special group project by trainees. The importance of cooperatives throughout the developing world should be stressed in this session. By tying in the marketing and economic needs of a small fishing community the trainees get a clearer picture of the needs for cooperatives.

Materials:

- flip chart, markers

Procedures:

Time	Activities
1 Hour 30 Minutes	1. Trainee leader offers introduction using following outline:
	A. Introduction - What are examples of some cooperatives?
	B. The cooperative principle
	C. Functions of a fishery cooperative

	D. Organizing cooperatives	- Needs or wants to be provided?
		- Potential profitability?
		- Volume of business to be expected?
		- Money required to operate, organize the cooperative?
		- Managerial requirements.
		- Can the cooperative be profitable?
	E. Initial capital can be obtained in many	- Membership stock
	ways	- Preferred stock
		- Borrowing from a bank
		- Membership fee
	F. The Board	- Operation of long range planning
		- Policy making body
	F. The Manager	- Day to day operation of cooperative

Trainer's Note:

This is a group project. It is up to the trainee leader to cover all material and involve other team members.

References:

- **Peace Corps, ICE, Resource Packet #5**

EXTENSION MARINE ADVISORY PROGRAM

**S. G. Number 19
Commercial Fishing Publication**

**Organizing and Operating
A fishery cooperative one
Part One**

By FREDERICK J. SMITH EXTENSION SPECIALIST, MARINE ECONOMICS OREGON STATE UNIVERSITY

The organization and operation of a successful fishery cooperative requires a knowledge and understanding of cooperative management and marketing concepts.

This publication provides information about cooperative organization, management, and legal instruments used in organizing and operating a cooperative. It is available in two parts. This portion, part one, provides an overview of cooperative organization and operation. Part two provides greater detail about the legal instruments and requirements of a fishery cooperative.

Questions or suggestions about fishing cooperatives should be directed to the Oregon State University marine economics extension specialist, Department of Agricultural Economics, Oregon State University, or to any of the marine extension agents in Oregon.

Part two (S. G. Number 19a) of this publication is available from Bulletin Mailing Services, Oregon State University, Corvallis, Oregon 97331.

THE COOPERATIVE PRINCIPLE

A fishery cooperative consists of a group of individual fishermen acting together for mutual benefit and is designed to accomplish group objectives. Through the cooperative

members jointly perform or obtain services which individuals usually could not accomplish alone.

Fishermen members own the cooperative by owning capital stock or by paying membership fees Each member usually has only one vote, in contrast to non. cooperative corporations In a non-cooperative corporation, votes are based upon the number of shares (stock) held by an individual

Therefore, in a cooperative, ownership and control are equally vested in each cooperative member, guaranteeing equal voice in the affairs of the organization Management is usually placed in the hands of persons selected by the board of directors who, in turn, are elected by members.



A cooperative consists of a group of individual fishermen acting together to accomplish group objectives.

The cooperative can be incorporated or organized as an unincorporated association. If the unincorporated association is used, it can be further organized under one of the following:

"i. General partnership - A partnership is an association of two or more persons who engage in business for profit. Each partner may bind his co-partner to obligations of the business and each partner is personally liable for business debts.

2. Limited partnership - This is the same as a general partnership except the liability of one or more partners is limited.

An incorporated cooperative has the advantage of providing limited liability to members, providing a business life independent of the individual members', and encouraging a more business-like organization and operation.

Fishery cooperatives must incorporate under state laws, but they can utilize the protective provisions of the Federal Fishery Cooperative Marketing Act of 1934 in their interstate and foreign commerce activities. This protection is gained through the assistance of the National Marine Fisheries Service of the U. S. Department of Commerce. The provisions of this Act require the cooperative to provide one vote per member, eight percent maximum dividend payment on capital stock, and that the cooperative's business with non-members be less than with members.

The organizing fishermen should obtain copies of state statutes regulating the establishment of a cooperative and a corporation and should employ the services of an attorney and a certified public accountant - one preferably familiar with cooperative law and taxation. A simple mistake in organization or accounting procedures can cause problems in operations. Part two of this publication provides some sample fishery cooperative by-laws.

Once the initial capital requirements are determined, there are three ways to obtain the

necessary capital. The initial capital may be provided by members who buy stock (shares) in the cooperatives - or it can be provided from membership fees. In addition, capital may be obtained from outside sources (nonmembers) by sale of preferred stock or by borrowing a portion of the required initial capital. Capital is also frequently borrowed from cooperative members as well as nonmembers.

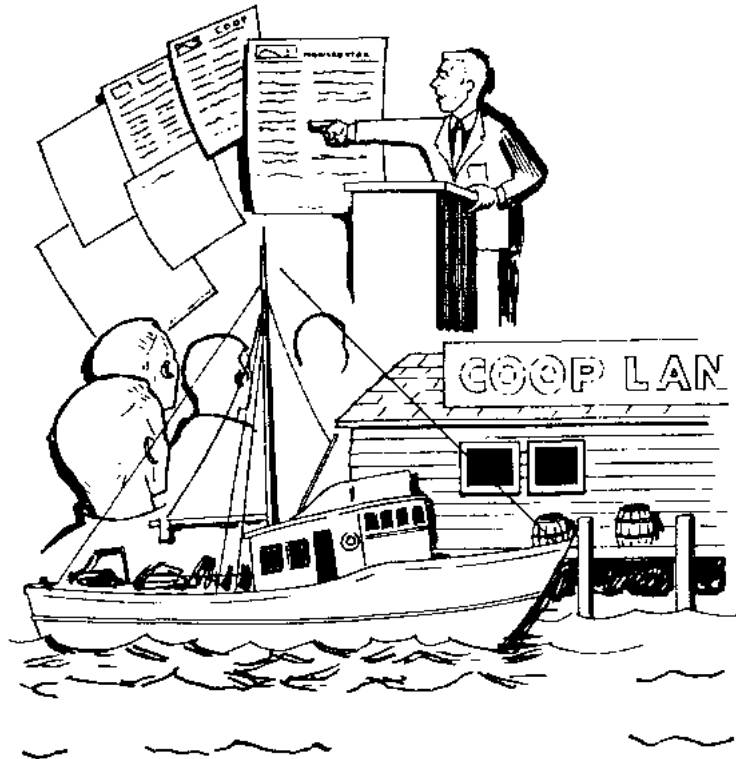
When determining the initial capital requirements, allowance should be made for at least a year or more of operation with costs exceeding revenues. (It usually takes some time for the cooperatives to get established and develop efficient operating procedures.) Therefore, it is necessary that more capital than required for the initial buildings, inventory, equipment, land purchases, and normal operating needs must be provided.

The board of directors is the range planning and policy making body of the cooperative. The salaried manager is responsible for the day to day and week to week decisions, and is accountable to the board of directors, who represent the fishermen members.

Election of the board of directors is regulated by the cooperative by-laws, but they are usually fellow fishermen elected by members at annual meetings.

The board is responsible for hiring the manager, defining his duties, and setting his salary. The board is also responsible for such things as audit of the cooperative's books, execution of purchase, and sales agreements with members. The board creates and has control of special committees dealing with such things as finance and membership.

The manager is placed in charge of business operations. He controls the daily flow of funds and is accountable to the board of directors for those funds. The manager maintains records and periodically presents a business report to the board of directors and the cooperative members. He also has full responsibility for cooperative employees. The manager of a fishery cooperative must be a man of many talents and should be paid accordingly.



Good membership and public relations should be established and maintained if the cooperative is to be successful.

The creation of a fishery cooperative must be based upon a real economic need. For example, cooperatives may be created to:

**stabilize income from season to season,
improve quality control,
pool funds to finance fishing operations at lower interest rates,
reduce cost of fishing supplies and equipment,
transport fish products more efficiently,
establish a competitive market for fish products,
provide a market for processing waste, and
provide special harbor and dockside facilities and services.**

A single cooperative may perform a number of different functions or may specialize in just one. For example, the more than 75 fishery cooperatives in the United States presently perform one or more of the following functions:

**transportation of fish products to processors or other markets,
operation of vessel servicing stations,
operation of vessel repair shops,
rental of trucks and other equipment to members,
negotiation with buyers on prices,
marketing of member's products,
purchasing of supplies and equipment for members,
arranging for financing,
operation of retail outlets,
operation of freezer and cold storage warehouses,
provision of docking facilities, and
operation of seafood processing plants.**

In most states there are very few limitations on the functions of a fishery cooperative. However, the functions must be legal.

ORGANIZING A COOPERATIVE

Interested fishermen should thoroughly discuss their common problems and needs. If the fishermen can agree on some common objectives that can be accomplished best by cooperative effort, they should then clearly define the purpose and functions of the proposed cooperative.

From this group of fishermen, a smaller group can proceed to investigate whether it would be economically sound to organize a cooperative with the desired functions and investigate the procedures of establishing a cooperative.

Much assistance can be obtained from the Cooperative Extension Service, Oregon State University Sea Grant Marine Advisory Program, National Marine Fisheries Service, Small Business Administration, some local attorneys, accountants, and financial institutions.

The smaller study group should find at least partial answers to the following questions:

What services do fishermen need or want in their particular geographical area that are not now being provided adequately by existing business?

What is the potential profitability of providing such services to fishermen?

What volume of business can be expected?

How much money will be required to organize and operate the cooperative?

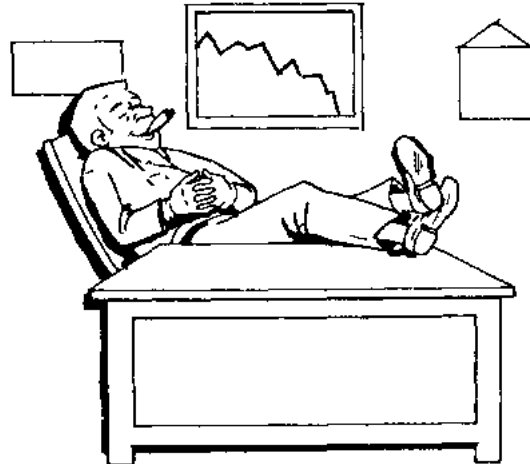
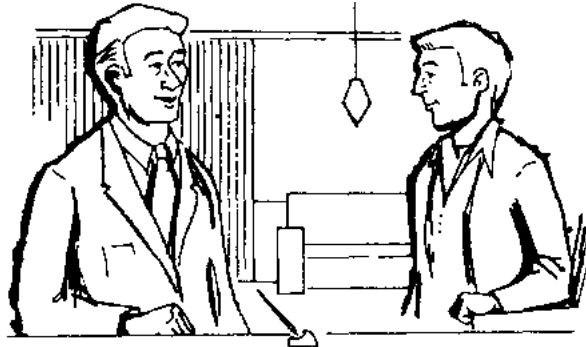
What are the managerial requirements of operating the cooperatives?

Can competition be met and the cooperative remain profitable over an extended period of time?

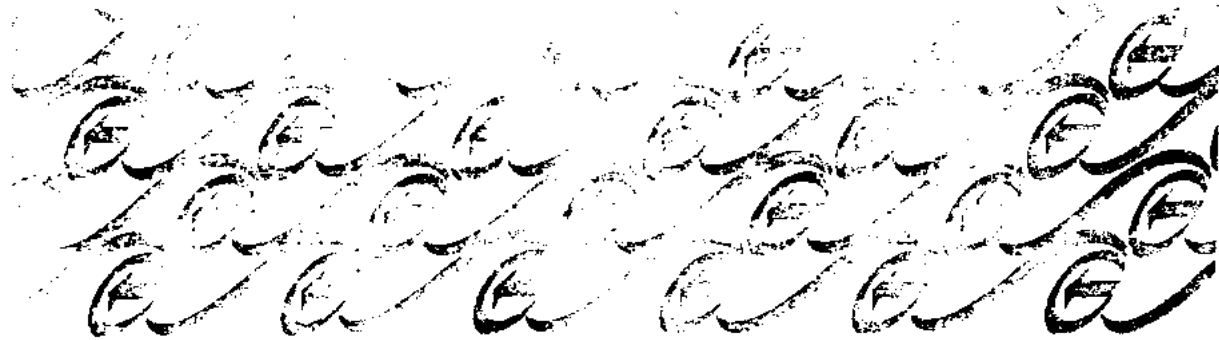
Answers to these questions will assist the larger group of interested fishermen in deciding whether to go ahead and organize a cooperative.

It is important to remember that a cooperative is a non-profit business only from the legal and accounting standpoint. A cooperative will surely fail if it does not provide services of economic value and its costs are greater than its revenues.

When it has been determined that a cooperative should be organized and its services are identified, consideration should then be given to its legal, capital, and operational structure. The fishery cooperative must organize under state laws and comply with the provisions of the Federal Fishery Cooperative Marketing Act of 1934.



A cooperative must guard against hiring a manager from the membership simply because he's a good fellow and needs a job!



This information is published by Oregon State University as part of the Department of Commerce National Oceanic and Atmospheric Administration Sea Grant Program.

Cooperative Extension work in agriculture and home economics, Lee Kolmer, director, Oregon State University and the U.S. Department of Agriculture, cooperating. Printed and distributed in furtherance of the Acts of Congress of May and June 30, 1914.

A 1970 survey of seven successful fishery cooperatives showed that, with one exception, the selection of the manager was the key element in the success of a fishery cooperative, and all surveyed indicated that business experience and business management ability was the key to being a good manager.

Although fishing knowledge is useful and should be acquired by any person managing a fishery cooperative, the cooperative must guard against hiring a manager from among the membership primarily because he is a good fisherman, or even because he is a poor fisherman but a good fellow and needs a job! The same survey also indicated that the board of directors should give the manager enough authority so that he can successfully exercise his managerial ability.

A regular audit and periodic financial reports and analysis of the cooperative are a crucial part of operation. These records will indicate the financial success of the cooperative from one time period to the next, give an indication of the efficiency of the operation, and provide information for more effective control of the organization's activities.

In many cases, the cooperative will be competing with large, aggressive, and well managed private firms that specialize in processing, marketing, and selling supplies and services. The fishery cooperative, on the other hand, depends heavily on the voluntary support of members, and occasionally a contribution of some members' time (serving on committees or the board of directors), and members' capita!. The benefits of the cooperative must more than offset the negative effect of these contributions upon the members' first business - fishing. Therefore, an efficient and financially successful cooperative is not an "extra," it is a necessity!

A marketing cooperative may use a variety of methods to pay members who deliver fish. These include:

Outright purchase plan - Under this arrangement, the fisherman is paid the current market price at time of delivery.

Pool payment plan - A plan whereby all catches are delivered to the cooperative and each fisherman is paid on the basis of the average prices over each pooling period for each pool.

Direct payment plan - The terms of each sale are arranged by or subject to approval of the cooperative.

The outright purchase plan usually causes less confusion. The pool payment plan is especially beneficial when landings are seasonal and of mixed species, or the marketing is erratic over an extended time period. The direct payment plan allows the cooperative to

evaluate the market situation and cooperative financial picture before payments are finally made to fishermen.

The disposition of profit at year end depends on whether the cooperative is stock or non-stock. For a stock corporation cooperative, dividends are first distributed to preferred stockholders and then to common stockholders. The balance may then be returned to patrons based upon their rate of patronage. Adequate reserves must be maintained within the cooperative, not only to meet emergencies, but to provide for business expansion.

Another important factor in operating a fishery cooperative is membership relations. An educational program that will keep membership informed of cooperative policy, financial condition, and operational and personnel changes will contribute much to cooperative success. In addition, procedures should be established to keep the cooperative in close touch with the current and changing needs of members. Cooperative members are not only the primary investors, they are also the patrons. They are, in fact, the cooperative, and it succeeds only to the extent that the members are committed to the cooperative's success.

Session T-92: Simple accounting techniques

Time: 7:30 AM

Goals:

- **To introduce simple accounting techniques**
- **For trainees to learn to read and use simple accounting forms**

Overview:

The use of Marine Economic Data Sheets and the simple accounting forms introduced in this session are all that is necessary to set-up a fishery station and operate it efficiently

with adequate record keeping.

Materials:

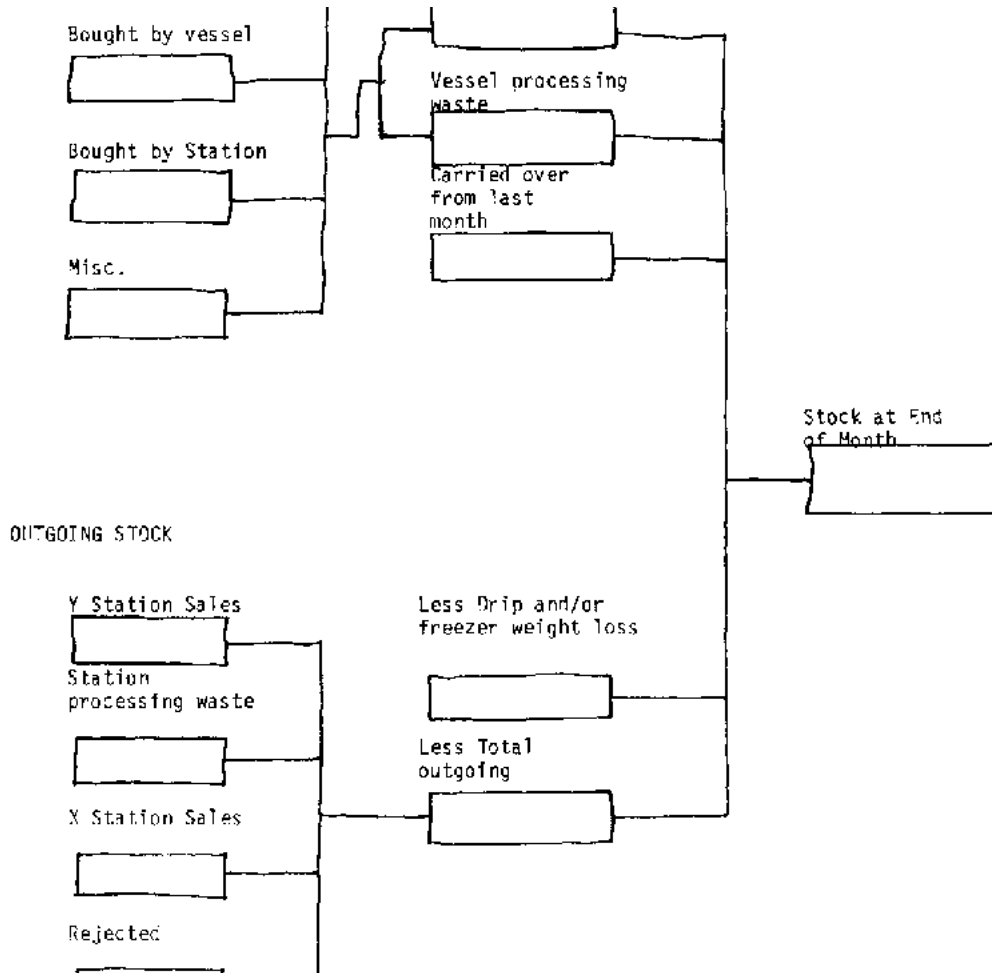
- **Flip charts, markers, copy of Accounting Formats, Fish Stock Analysis (see Appendix 1 and 2)**

Procedures:

Time	Activities
5 Minutes	1. Technical trainer starts session by reviewing MEDs.
15 Minutes	2. Presents simple accounting format as follows:
	a. Income
	b. Unpaid accounts
	c. Accounts paid
	d. Summary
10 Minutes	3. Trainer introduces fish stock analysis format:
	a. Incoming Stock
	b. Outgoing Stock
30 Minutes	4. Trainer now passes around sample forms. Gives trainees information based on fictitious fishing operation. Trainees put information in proper places. Trainer checks for accuracy.

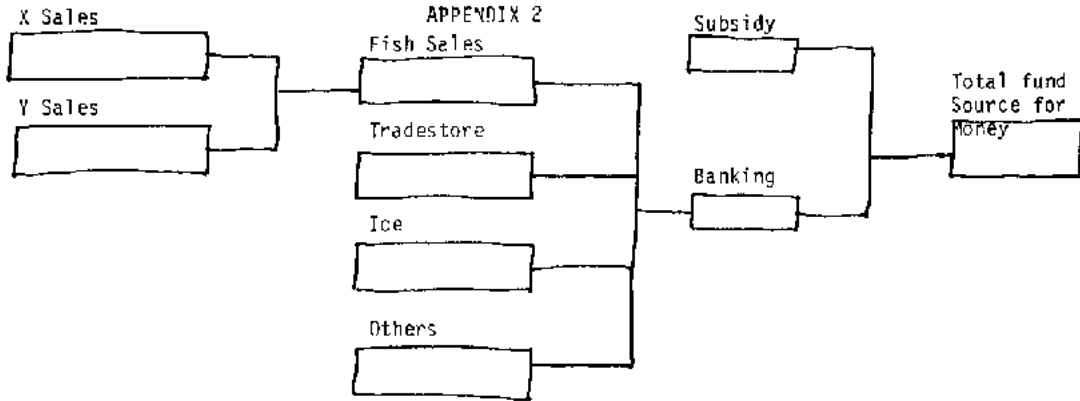


Received x Terminal

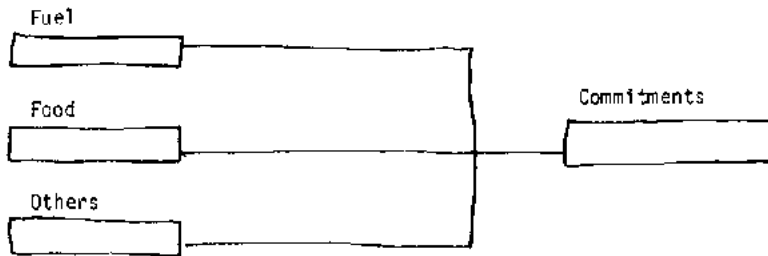




Appendix 1



2. Unpaid Accounts

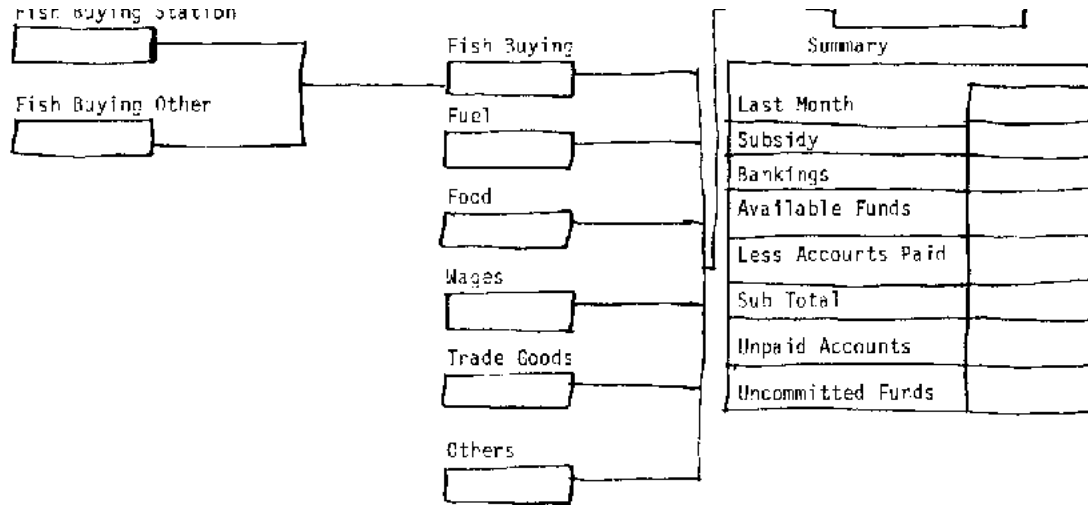


3. Accounts Paid

Accounts Paid

Bank Balance





Appendix 2

Session T-93: Reef survey preparation

Time: 8:30 AM

Goals:

- To provide orientation to coral reefs and the marine flora and fauna
- To acquaint trainees with skin diving/snorkeling techniques and the buddy system
- To acquaint trainees with the necessary preparation details essential to a reef dive and survey

Overview:

This session is the preliminary to session 96. An orientation is essential as most trainees are not familiar with open water skin diving/ snorkeling. Also, the trainees should be aware of associated dangers whenever working on a reef system. A special emphasis is placed on the necessity of the buddy system when diving. A theme of safety is a requirement for this session.

Materials and Equipment:

- **Flip chart, markers, masks, snorkles, fins, marine flora/fauna identification guides**
- Procedures:**

Time	Activities
2 Hours	1. Technical Trainer gives presentation using following outline posted on flip chart paper:
	A. Reef survey preview
	- Departure time early enough to travel to reef area, dive and return
	- Type of diving snorkel only (for safety considerations)
	- Personal gear
	PFD, proper clothing, gloves, hat, sunglasses, tennis shoes, knife, swim suit with t-shirt, mask, snorkel, fins, dive knife/tool, sun block lotion (NO SPEARGUNS OR SPEARS ALLOWED)
	- Food to prepare protein types water fruits
	- Miscellaneous first aid kit ice, ice box
	- Assigning of groups to prepare food miscellaneous ice box/ice
	- Orientation to Coral Reef flora and fauna dangerous marine organisms poisonous and toxic marine fish (see Session T-51)

	- Skin diving/snorkeling prerequisite to diving equipment buddy system
	- Survey skills ability to recognize and identify coral types, reef fishes, other marine animals locate and identify beche-de-mer (Sea cucumbers) (see SPC Booklet on South Pacific Beche-de-mer) check reef area for dead, dying corals from siltation, identify other ecological damage

Session T-94: Artificial reefs and floating tire breakwaters - special project

Time: 4 PM

Goals:

- **To enlighten trainees regarding the design and function of artificial reefs and floating tire breakwaters**
- **To construct an artificial reef**
- **To provide technical transfer and workshop skills to the trainee conducting the session**

Overview:

This session is done by a trainee as a special project. The protection of estuarine habitats is becoming an important consideration in developing countries.

Materials and Equipment:

- **Flip charts, markers, used tires, monofilament twine, knives, handsaw**

Procedures

Time	Activities
-------------	-------------------

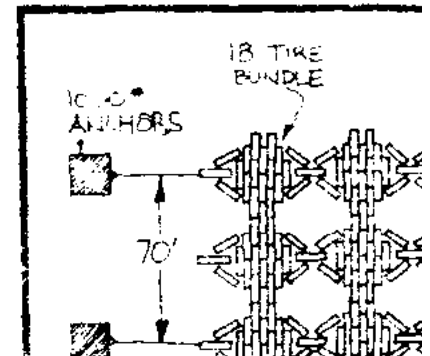
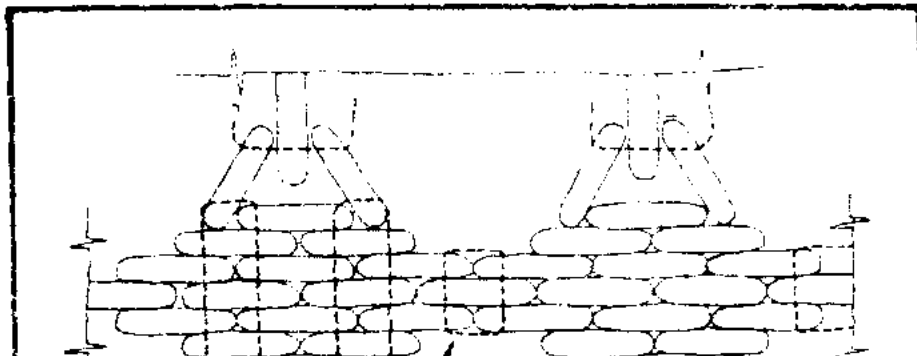
2 Hours	1. Trainee gives presentation on floating tire breakwaters and their uses.
	2. A scale model of a floating tire breakwater may be constructed if materials and time permits
	3. Trainee gives a presentation on artificial reefs, habitat development and possible construction materials.
	4. A construction project utilizing used tires for an artificial reef is conducted by the trainee. Ample materials for all trainees' involvement and understanding is a prerequisite.

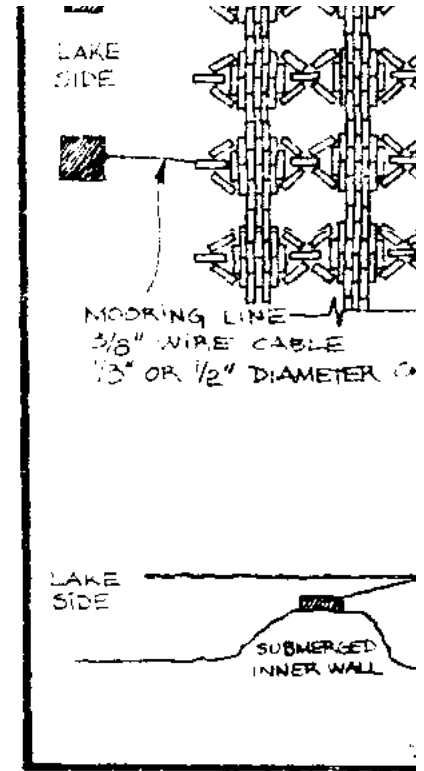
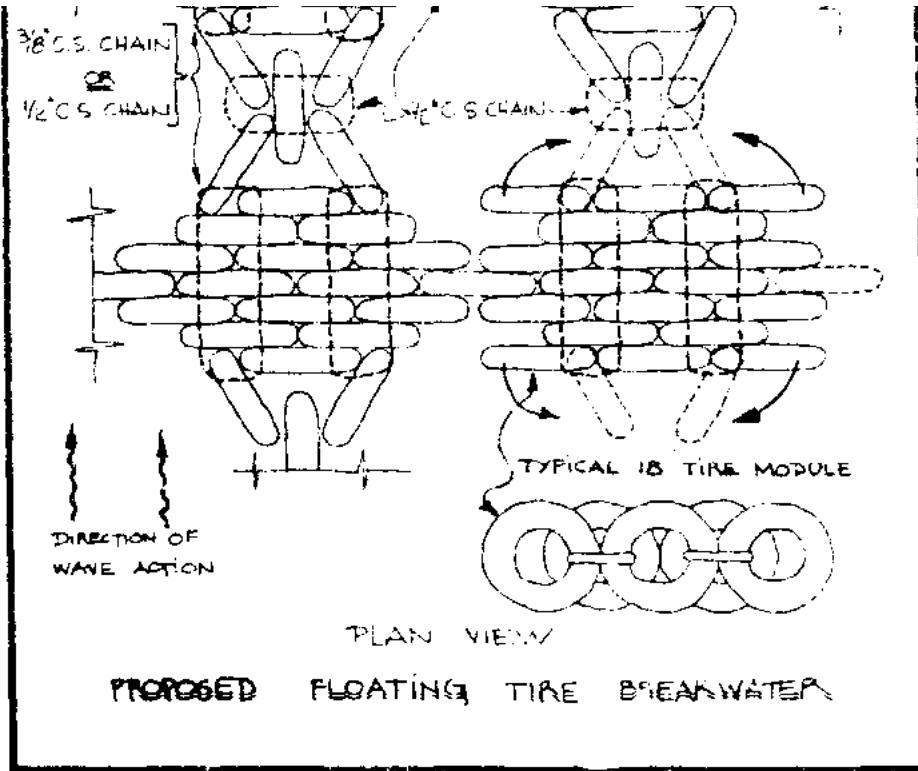
Trainer's Note:

During pilot program, local fishermen assisted trainees in the construction of tire breakwater and artificial tire reef structures, and utilized them afterwards. References:

- **Ross, N. University Rhode Island, Narragansett, R.I. 02882 USA**

URI Peace Corps Training Program





Floating tire breakwater

Goodyear Design

For more information write: Neil Ross, University of Rhode Island, Narragansett, R.I..
02882, USA

Session T-95: Resources/proposal writing

Time: 7:30 PM

Goals:

- **To restate the importance of local resources so that trainees can register this approach again**
- **To identify local resources, where to find them, how to approach them**
- **To identify national and international resources and look at how best to approach them**
- **To acquaint trainees with the elements of a well presented proposal**

Overview:

This session reinforces previous extension and community analysis learnings by once again stressing the concepts of community self-reliance and the importance of relying on local resources when initiating community projects. As important as a new bridge or well might be for the long term welfare of a community, equally important is the degree of local 'capacity-building' that results. Could the community build another bridge or well without the volunteer's assistance? As a result of the bridge or well, has the ability of individuals and communities to identify and seek out their own problem-solving information, learning needs and resources been strengthened? This session explores the implications of bringing in outside resources and the where, who and how of locating funds and writing small grants proposals.

Materials:

- **Article by E.F. Schumacher, Catalogs, guidelines, newsletters from funding sources for display and perusal by trainees**

Procedures:

Time	Activities
30 Minutes	1. The trainer gives a lecture on resources using the following outline posted on newsprint.
	A. Do you really need outside help?
	o Have you exhausted local solutions?
	o What are the implications of outside help?
	- dependency
	- non-support of local potential (capacity building)
	- creativity
	B. If you really need help:
	o What resources are available?
	- financial
	- material
	- technical
	o What sources?
	- Local private: clubs, service organizations, professional associations, churches, etc.
	government: local, national
	- National
	- International USAID, Peace Corps (ICE, Partnership Program), CARE, Catholic Relief Services, FAO, World Bank, IITA, etc.
	C. Elements of a good proposal:
	o A clear description of the problem

	o A description of the proposed solution.
	o A statement of what is needed in terms of funds.
	o A simple budget showing the items to be purchased.
	o The name of the organization to whom the grant is to be made.
20 Minutes	2. Trainer passes out a short excerpt from E.F. Schumacher's Small is Beautiful. Trainees take 20 minutes to read the article.
30 Minutes	3. Trainees break into their country-specific groups and are told to put on newsprint those points from the article which will most likely have impact on their own programs. Groups report out to the large group. Trainers relate personal experiences from their own programs in developing countries.
10 Minutes	4. Trainer draws closure to the session by again stressing the importance of capacity-building goals as an integral part of any community project.

Trainer's Note:

Draw comparison between 'capacity-building' and Schumacher's 'evolution' before trainees read the excerpt Development.

References:

- **Forestry Training Manual**

DEVELOPMENT by E.F. Schumacher (from: Small is Beautiful) A British Government White Paper on Overseas Development some years ago stated the aims of foreign aid as follows:

To do what lies within our power to help the developing countries to provide their people with the material opportunities for using their talents, of living a full and happy life and steadily improving their lot.

It may be doubtful whether equally optimistic language would be used today, but the basic philosophy remains the same. There is, perhaps, some disillusionment: The task turns out to be much harder than may have been thought - and the newly independent countries are finding the same. Two phenomena, in particular, are giving rise to world-wide concern - mass unemployment and mass migration into cities. For two-thirds of mankind, the aim of a "full and happy life" with steady improvements of their lot, if not actually receding, seems to be as far away as ever. So we had better have a new look at the whole problem.

Many people are having a new look and some say the trouble is that there is too little aid. They admit that there are many unhealthy and disrupting tendencies but suggest that with more massive aid one ought to be able to overcompensate them. If the available aid cannot be massive enough for everybody, they suggest that it should be concentrated on the countries where the promise of success seems most credible. Not surprisingly, this proposal has failed to win general acceptance.

One of the unhealthy and disruptive tendencies in virtually all developing countries is the emergence, in an ever more accentuated form, of the "dual economy," in which there are two different patterns of living as widely separated from each other as two different worlds. It is not a matter of some people being rich and others being poor, both being united by a common way of life: It is a matter of two ways of life existing side by side in such a manner that even the humblest member of the one disposes of a daily income which is a high multiple of the income accruing to even the hardest working member of the other. The social and political tensions arising from the dual economy are too obvious to require description.

In the dual economy of a typical developing country, we may find fifteen percent of the population in the modern sector, mainly confined to one or two big cities. The other eighty-five percent exists in the rural areas and the small towns. For reasons which will be

discussed, most of the development efforts goes into the big cities, which means that eighty-five percent of the population are largely bypassed. What is to become of them? Simply to assume that the modern sector in the big cities will grow until it has absorbed almost the entire population--which, is of course, what has happened in many of the highly developed countries--is utterly unrealistic. Even the richest countries are groaning under the burden which such a maldistribution of population inevitably imposes.

In every branch of modern thought, the concept of "evolution" plays a central role. Not so in development economies, although the words "development" and "evolution" would seem to be virtually synonymous. Whatever may be the merit of the theory of evolution in specific cases, it certainly reflects our experience of economics and technical development. Let us imagine a visit to a modern industrial establishment, say a great refinery. As we walk around in its vastness, through all its fantastic complexity, we might well wonder how it was possible for the human mind to conceive such a thing. What an immensity of knowledge, ingenuity, and experience is here incarnated in equipment! How is it possible? The answer is that it did not spring ready-made out of any persons mind-it came by a process of evolution. It started quite simply, then this was added and that was modified, and so the whole thing became more and more complex. But even what we actually see in this refinery is only, as we might say, the tip of the iceberg.

What we cannot see on our visit is far greater than what we can see: The immensity and complexity of the arrangements that allow crude oil to flow into the refinery and ensure that a multitude of consignments of refined products, properly prepared, packed and labelled, reaches innumerable consumers through a most elaborate distribution system. All this we cannot see. Nor can we see the intellectual achievements behind the planning, the organizing, the financing and marketing. Least of all can we see the great educational background which is the precondition of all extending from primary school to university and specialized research establishments, and without which nothing of what we actually see would be there. As I said, the visitor sees only the tip of the iceberg; there is ten times

as much somewhere else, which he cannot see, and without the "ten", the "one" is worthless. And if the "ten" is not supplied by the country or society in which the refinery has been erected, either the refinery simply does not work or it is, in fact, a foreign body depending for most of its life on some other society. Now, all this is easily forgotten, because the modern tendency is to see and become conscious of only the visible and to forget the invisible things that are making the visible possible and keep it going.

Could it be that the relative failure of aid, or at least our disappointment with the effectiveness of aid, has something to do with our materialist philosophy which makes us liable to overlook the most important precondition of success, which are generally invisible? Or if we do not entirely overlook them, we tend to treat them just as we treat material things--things that can be planned and scheduled and purchased with money according to some all-comprehensive development plan. In other words, we tend to think of development, not in terms of evolution, but in terms of creation.

Our scientists incessantly tell us with the utmost assurance that everything around us has evolved by small mutations sieved out through natural selection. Even the Almighty is not credited with having been able to create anything complex. Every complexity, we are told, is the result of evolution. Yet our development planners seem to think that they can do better than the Almighty, that they can create the most complex things at one throw by a process called planning, letting Athene spring, not out of the head of Zeus, but out of nothingness, fully armed, resplendent, and viable.

Now, of course, extraordinary and unfitting things can occasionally be done. One can successfully carry out a project here or there. It is always possible to create small ultra-modern islands in a pre-industrial society But such islands will then have to be defended, like fortresses, and provisioned, as it were by helicopter from far away, or they will be flooded by the surrounding sea. Whatever happens, whether they do well or badly, they produce the "dual economy" of which I have spoken. They cannot be integrated into the

surrounding society, and tend to destroy its cohesion.

We may observe in passing that similar tendencies are at work even in some of the richest countries, where they manifest as a trend toward excessive urbanization, toward "megalopolis", and leave, in the midst of affluence, large pockets of poverty-stricken people, "drop-outs," unemployed and unemployables.

Until recently, the development experts rarely referred to the dual economy and its twin evils of mass unemployment and mass migration into cities. When they did so, they merely deplored them and treated them as transitional. Meanwhile, it has become widely recognized that time alone will not be the healer. On the contrary, the dual economy, unless consciously counteracted, produces what I have called a "process of mutual poisoning," whereby successful industrial development in the cities destroys the economic structure of the hinterland, and the hinterland takes its revenge by mass migration into the cities, poisoning them and making them utterly unmanageable. Forward estimates made by the World Health Organization and by experts like Kingsley Davies predict cities of twenty, forty and sixty million inhabitants, a prospect of "immiseration" for multitudes of people that staggers the imagination.

Is there an alternative? That the developing countries cannot do without a modern sector, particularly where they are in direct contact with the rich countries, is hardly open to doubt. What needs to be questioned is the implicit assumption that the modern sector can be expanded to absorb virtually the entire population and that this can be done fairly quickly. The ruling philosophy of development over the last twenty years has been: "What is best for the rich must be best for the poor." This belief has been carried to truly astonishing lengths, as can be seen by inspecting the list of developing countries in which the Americans and their allies and in some cases also the Russians have found it necessary and wait to establish "peaceful" nuclear reactors--Taiwan, South Korea, Philippines, Vietnam, Thailand, Indonesia, Iran, Turkey, Portugal, Venezuela--all of them countries

whose overwhelming problems are agriculture and the rejuvenation of rural life, since the great majority of their poverty-stricken peoples live in rural areas.

The starting point of all our considerations is poverty, or rather, a degree of poverty which means misery, and degrades and stultifies the human person; and our first task is to recognize and understand the boundaries and limitations which this degree of poverty imposes. Again, our credulous materialistic philosophy makes us liable to see only "the material opportunities" (to use the words of the White Paper which I have already quoted) and to overlook the immaterial factors. Among the causes of poverty, I am sure, the material factors are entirely secondary—such things as a lack of infrastructure. The primary causes of extreme poverty are immaterial; they lie in certain deficiencies in education, organization, and discipline.

Development does not start with goods; it starts with people and their education, organization and discipline. Without these three, all resources remain latent, untapped, potential, There are prosperous societies with but the scantiest basis of natural wealth, and we have had plenty of opportunity to observe the primacy of the invisible factors after the war. Every country, no matter how devastated, which had a high level of education, organization, and discipline, produced an "economic miracle". In fact, these were miracles only for people whose attention is focused on the tip of the iceberg. The tip had been smashed to pieces, but the base, which is education, organization and discipline was still there.

Here, then, lies the central problem of development. If the primary causes of poverty are deficiencies in these three respects, then the alleviation of poverty depends primarily on the removal of these deficiencies. Here lies the reason why development cannot be an act of creation, why it cannot be ordered, bought, comprehensively planned: Why it requires a process of evolution. Education does not "jump") it is a gradual process of great subtlety. Organization does not "jump"; it must gradually evolve to fit changing circumstances. And

much the same goes for discipline. All three must evolve step by step, and the foremost task of development policy must be to speed this evolution. All three must become the property not merely of a tiny minority, but of the whole society.

If aid is given to introduce certain new economic activities, these will be beneficial and viable only if they can be sustained by the already existing educational level of fairly broad groups of people, and they will be truly valuable only if they promote and spread advances in education, organization, and discipline. There can be a process of stretching--never a process of jumping.

If new economic activities are introduced which depend on special education, special organization, and special discipline, such as are in no way inherent in the recipient society, the activity will not promote healthy development but will be more likely to hinder it. It will remain a foreign body that cannot be integrated and will further exacerbate the problem of the dual economy.

It follows from this that development is not primarily a problem of economists, least of all for economists whose expertise is found on a crudely material philosophy. No doubt, economists of whatever philosophical persuasion have their usefulness at certain stages of development and for strictly circumscribed technical jobs, but only if the general guidelines of a development policy to involve the entire population are already firmly established.

The new thinking that is required for aid and development will be different from the old because it will take poverty seriously. It will not go on mechanically, saying: "What is good for the rich must also be good for the poor." It will care for people - from a severely practical point of view. Why care for people? Because people are the primary and ultimate source of any wealth whatsoever. If they are left out, if they are pushed around by self-styled experts and high handed planners, then nothing can ever yield real fruit.

Session T-96: Reef survey**Time: 6 AM****Goals:**

- **To provide fundamentals in coral identification, reef fish identification and coral reef topography**
- **To allow trainees the opportunity to acquire basic snorkeling/ diving techniques**
- **To acquaint trainees with survey techniques in which to properly assess the carrying capacity of a given reef in as short a time as possible**

Overview:

This session is particularly useful to the marine fisheries PCV. They have a need to understand the dynamics of change affecting coral reefs. For the PCV to be able to survey a reef for potential exploitation of underutilized fish species and assess the carrying capacity is also important. In addition, the role of the PCV as a coral reef ecologist providing extension workshops on conservation to fishing communities, underutilized species exploitation or implementation of artificial reefs will greatly assist the development of small-scale fisheries in the PCV specific country.

Materials and Equipment:

- **Flip chart, markers, diving gear (mask, snorkel, flippers, diving knife/tool, storage bag) small boat 8-12 feet with outboard, or large Diesel vessel for bigger group.**

Trainer's Note:

This session can be supplemented with tie-ins to other small-scale fishing sessions. Orientation to Poisonous/Toxic Marine Fish- Special Project should be conducted prior to this session.

Procedures:

Time	Activities
12 Hours	1. The following areas are covered during reef survey:
	a. introduction to surveys
	- visual sightings
	- classification of marine life
	b. orientation to coral reefs
	- corals identification
	- reef fishes identification
	- coral reef topography
	c. equipment (snorkeling)
	- hardware
	- software
	d. survey of a living coral reef
	- buddy system
	- group system
	e. survey of a dying/dead coral reef
	- analysis of cause
	- solutions
	f. data acquisition

	h. data acquisition
	- visual
	g. potential markets
	- underutilized species
	- processing

Trainer's Notes:

Care should be taken to insure an adequately stocked first aid kit, innertubes for diver floats, and fresh drinking water. Most trainees will be entering an environment which is new to them, an environment with hidden dangers, i.e. sea urchins, coral cuts, shark menace, sunburn--the list goes on. Caution and safety must be stressed at all times. Again, spearguns and spears should not be allowed on the trip.

Session T-97: Interviews**Time: 7:30 AM****Trainer's Note:**

Although throughout training, net mending and interviews have been conducted simultaneously during this session we have deliberately omitted net mending. Our experience has been when trainees have been out on the boat for long periods of time, i.e. reef survey, they are extremely tired the next day.

Interviews are conducted the same as in previous interview sessions.

Session T-98: Fish issues - special group project**Time: 1 PM**

Goals:

- **To look at fishing issues that marine fisheries extensionists may encounter in their work, particularly those involving the local economy and local and international politics**
- **To look at various approaches and methods that a marine fisheries extensionist can use to raise the consciousness of a community and assist them in dealing with fishing issues**
- **To look at specific approaches and methods for different audiences i.e., a fishermen's cooperative, government officials, officials from an international organization, such as FAO**
- **For the trainee assigned the special project to build on leadership, communication and technology transfer skills.**

Overview:

The local economy of many third world fishing communities is being adversely affected by the advanced fishing technology of trawlers from developed countries fishing off their coastal waters. This issue and other issues, such as tribal and family fishing rights, are often very politically-charged. Marine Fisheries PCVs may come face to face with one or more of these issues. In this session, trainees look at various approaches to dealing with these issues at the local, national and international level, approaches which are appropriate to the PCV development worker. Trainers have the opportunity as well in this session to relate personal experiences and knowledge of these issues.

Materials:

- **flip chart, markers**

Procedures:

Time	Activities
15 Minutes	1. Trainee assigned the special group project gives a mini-lecture on current fishing issues in developing countries, particularly as they relate to the local economy and local and international politics. The difficulties PCVs and other "outsiders" encounter in dealing with these issues at the community level is also discussed.
1 Hour	2. Trainees assisting the group project leader give three presentations: each presentation is directed at a different "audience", i.e., a fishermen's cooperative, government officials, a village meeting; and a different fishing issue is the topic of the presentation. After each presentation, the group project leader processes the points made and the approach used, and gives trainees a list of suggestions for working with that particular audience.
5 Minutes	3. Trainee group leader draws closure to session by linking back to extension and community analysis sessions.

Trainer's Note:

As in the session on ecology and conservation issues, the training program may or may not have access to country-specific fishing issues. It's important to keep in mind that the major learnings of this session are not the issues, but rather the approaches used in presenting these issues to particular audiences.

References:

- **Marine Fisheries Case Studies, Peace Corps.**

Session T-99: Ecology and conservation - special group project

Time: 2:30 PM

Goals:

- **To look at ecology and conservation issues that marine fisheries extensionists may encounter in their work**
- **To look at various approaches and methods that a marine fisheries extensionist can use to raise the consciousness of the community around ecology and conservation issues**
- **To look at specific approaches and methods for different audiences, i.e., a women's group, school children, fishermen's cooperative, etc.**
- **For the trainee assigned the special project to build on leadership, communication and technology transfer skills**

Overview:

There are many problems associated with good ecology and conservation practices in developing countries which trainees need to be aware of: many ecology issues are complex and abstract; good practices may conflict with the livelihood of local fishermen; ecology and conservation problems are often "invisible"; and the government may be indifferent. In this session, these issues and problems are discussed, and trainees look at ways ecology issues could be presented to a community. Trainers also have an opportunity to talk about their own experiences in developing countries, and to point out that until the basic needs of third world people are met, good ecology and conservation practices have little chance of succeeding.

Materials:

- **flip chart, markers**

Procedures:

Time	Activities
-------------	-------------------

TIME	ACTIVITIES
15 Minutes	1. Trainee assigned the group project asks trainees to define ecology and conservation. Trainee then gives a mini-lecture on current areas of concern: marine fisheries ecology and conservation-related issues. The difficulties in introducing good environmental practices are also presented to the group.
1 Hour	2. Trainees assisting the group project leader give three presentations: each presentation is directed at a different "audience", i.e. women, trap fishermen, school children; and a different ecology issue is the topic of the presentation. After each presentation, the group project leader processes the points made and the approach used, and gives trainees a list of suggestions for working with that particular "audience."
5 Minutes	3. Trainee group leader draws closure to session, linking back to previous sessions on extension, WID and community analysis.

Trainer's Note:

The training program may or may not have access to country-specific ecology and conservation issues. It's important to keep in mind that the major learnings of this session are not the issues, but rather the approaches used in presenting these issues to particular audiences.

Sample report developed during pilot program follows:

TEACHING ECOLOGY AND CONSERVATION Papua New Guinea * Sierra Leone * Tonga

Introduction

1. What is ecology?

Ecology is the study of the intraspecific and interspecific interactions of organisms in and with their environment and the interactions of environmental elements with each other.

Ecological problems are generally problems of imbalance.

2. What is conservation?

Conservation is the preservation, management and/or wise use of resources. Conservation involves careful planning. Conservation problems are generally problems of exploitation.

3. What areas of concern may be confronted in marine fisheries work?

Overfishing of particular species (i.e. lobster in Puerto Real, bonga in Sierra Leone) and/or areas (i.e. within the barrier reef in Tonga). Destruction of habitat - pollution of harbors and estuaries by silt, sewage and agricultural run-off. Destruction of reefs by suffocation (silt), lysis (fresh water) and extraction for use as building material. Conflict of usage (i.e. fish productivity vs fuel consumption in mangrove estuary). Deforestation (silting, erosion). Introduction of exotic species which results in imbalance. Introduction of environmental policy/management concepts.

4. What are some problems of introducing ecology and conservation in a developing nation?

Ecological concepts are complex and abstract and may be difficult to comprehend for individuals with limited educational backgrounds. Ecologically sound conservation practices may conflict with the livelihoods of some fishermen. Ecology and conservation occupy advanced positions in the hierarchy of needs and will be of little concern to individuals who have not met their safety needs. The results of ecologically sound conservation practices are generally delayed, taking long periods of time to become apparent. The symptoms of environmental problems may be subtle. Why deal with an "invisible" problem? The government may be indifferent to problems of ecology and conservation. The source of an ecological or conservation problem may be external to a village or its resources (i.e. Japanese tuna fishing vessel). Greed runs rampant and

international law is difficult to enforce.

Presentation

1. The extensionist meets a group of village women while fetching water at the well. She discovers that their husbands, the local fishermen, are having difficulty catching bonga, a popular variety of fish, but are catching large quantities of trigger fish, a variety which, at present, is not marketable. She explains that if they can develop a market for trigger fish (by filleting it or preparing it in a desirable manner) and sell all the trigger fish that their husbands catch, they can make more money and leave more "room" in the water for bonga.

Suggestions for working with women:

- a. Tie concepts into their daily lives and activities: family, making money, etc.**
- b. Remember high illiteracy rates and low levels of formal schooling.**
- c. Keep in mind demands on time.**
- d. Utilize pre-existing groups or gathering spots.**
- e. Elicit responses and ideas.**

2. The extensionist meets informally with a group of trap fishermen who are having difficulty catching lobsters because divers from a neighboring village are exploiting the lobster population. She explains that it is important to release female lobsters with eggs and young lobsters if there are to be lobsters when their children are grown. She then facilitates the fishermen's decision to meet with the divers and to share the importance of this practice with them.

Suggestions for working with fishermen:

- a. Organize fishermen - either informally or formally.**
- b. Keep topics simple and relative to fisherman's daily life.**
- c. Discuss benefits and drawbacks of techniques or topics to be discussed**
- d. Discuss monetary gains and losses**
- e. Relate effects to family, both immediate and future generations.**
- f. Assess time spent- both long term and short term.**
- g. Review existing legislation and discuss possible legislation which may affect fishermen and fishing.**

3. The extensionist is invited to talk with a group of school children. Upon arrival, she distributes tags which bear the names of the sun, man and several organisms which live in a mangrove swamp to the children. She then shares with them the two types of webs found in a mangrove swamp: spiders' webs and food webs. To show how the food web is weakened when some of its components are eliminated, she has the children construct a "food web" using string to connect related "organisms" and then has some of the "organisms" drop their strings. To show the flow of energy through the food web, the extensionist has the children play a special variety of tag in which "organisms" tag what they eat and are tagged by what eats them. (energy is individually wrapped candies or peanuts. Plants get their energy from the sun. If an "organism" is tagged, he gives one piece of "energy" to his tagger and one to "used up energy.") Finally, she facilitates analysis of the distribution of energy by the children.

Suggestion for working with children:

- a. Limit your presentation or program to just a few key ideas, and keep those ideas simple.**
- b. Use examples which are part of the childrens day-to-day experiences.**

c. Use questioning strategies to help children formulate the desired information themselves.

d. Remember that children have short attention spans and that it is best for them to learn actively (have fun!).

e. If active learning is to take place, an informal setting is usually best. Environment is important!

f. Be aware that many of the children may have basic needs which have not been met. It is difficult to learn when you are hungry!

g. Use the children's names often.

h. Do not underestimate the importance of working with children; they are tomorrow's decision-makers.

Addendum 1. Food Web Game - Components of mangrove food web and what takes their energy:

Man Mosquito Oyster Mangrove
Mosquito Heron Man Mosquito
Crocodile Mullet Heron Man

Session T-100: Report writing

Time: 7:30 PM

Overview:

The purpose of this session is for the trainees to evaluate the training program in the format of an official memorandum.

Procedures

Time	Activities
1 Hour 30 Minutes	1. The trainer presents the following report format and content outline, and tells trainees to write a three to five page memorandum to a Peace Corps/Washington official, i.e. Fisheries Specialist or Director, OPD.

Trainer's Note:

Trainer may want to suggest that trainees do a draft during the session, and hand in the final copy at the end of the next day.

SAMPLE FORMAT

Memorandum

TO: Fisheries Specialist or Director, OPD

FROM: Trainee

SUBJECT: Marine Fisheries Training Program

Content Outline

- 1. List out your major learnings in this training program.**
- 2. Which dimensions of this training program will have the most impact on your success**

as a Peace Corps Volunteer?

3. How do you see your competence/confidence level as a marine fisheries extensionist?

4. In what ways do you feel you have met your personal learning goals for this training program?

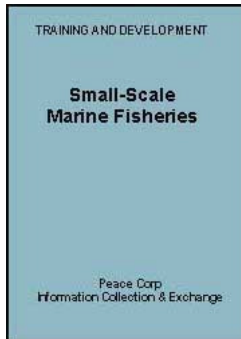
5. The training site and facilities.

6. Other - optional.

7. Conclusion/summary of report.



[Home](#) > [ar.cn.de.en.es.fr.id.it.ph.po.ru.sw](#)



Small-Scale Marine Fisheries - A Training Manual (Peace Corps, 1983, 631 p.)

➔ **Week 8: Training**

(introduction...)

Session T-101: Alternative energy forms special group project






Session T-102: Water heater special project

Session T-103: Wellness

Session T-104: Professional approaches to interaction with host country officials

Session T-105: Fisheries statistics

Session T-106: Country specific slides

-  **Session T-107: Aquaculture special project and field trip**
-  **Session T-108: Culture shock**
-  **Session T-109: Final interviews**
-  **Session T-110: Training closure**
-  **Session T-111: Graduation ceremony**

Small-Scale Marine Fisheries - A Training Manual (Peace Corps, 1983, 631 p.)

Week 8: Training

NO DAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
AM Session T-101 7:30 AM SGP Alternative Energy Forms Session T-102 10:00 AM SP Water Heater	Session T-105 7:30 AM Fisheries Statistics	Session T-107 7:30 AM SP Aquaculture 9:00 AM Aquaculture Field Trip	Session T-109 7:30 AM Final Interview			
PM Session T-103 4 PM Wellness				Session T-110 5:30 PM Training Closure	Session T-111 1 PM Graduation Ceremony	

EVE				
Session T-104 7:30 PM Professiona Approaches	Sessfor T-106 7:30 PM Country Specific Slides	Session T-108 7:30 PM Culture Snuck		6:30 PM Graduation Dinner

Week 8, Sessions 101 Thru 111

Session T-101: Alternative energy forms special group project

Time: 7:30 AM

Goals:

- To acquaint trainees with alternative forms of energy
- To look at some applications for wind, solar, biogas and other alternative energy sources
- To identify resources for additional information on alternative energy technologies
- To enable trainee doing the special group project to practice and build on leadership communication/technology transfer skills

Overview:

In this session trainees become familiar with third world energy issues and current appropriate energy technologies. Trainers have the opportunity as well in this session to discuss the long and arduous hours that women in particular spend on daily household chores in developing countries chores such as collecting firewood and hauling water. The time required for those diary tasks will most likely compete directly with the interventions they as Peace Corps Volunteers will be trying to introduce. Trainers stress the value of mud stoves and other labor-saving technologies and devices as secondary project activities.

Procedures:

Time	Activities
2 Hours	1. Group leader and team members present an overview of energy technologies and their degree of appropriate ness in developing countries, including water pumping wind systems, wind generators, solar dryers, solar water heaters, photo-voltaic cells, methane digesters, mud stoves and hydrams.
15 Minutes	2. Group leader and team members present a list of resources for additional information on the above, including ICE, the Appropriate Technology Sourcebook Vol I and II, and the ITDG publication list.

References:

• A.T. Sourcebook I, II; The Chinese Biogas Manual; Lorena Stoves; How to Build a Cretan Sail Windpump; Wind and Windspinners; Simplified Wind Power Systems for Experimenters; and the ICE Publication List

ALTERNATIVE ENERGY FORMS

Why Consider alternative energy?

Fossil fuels, the most widely used energy source, are expensive, must usually be imported and are unavailable to many poorer rural communities. The importation of fossil fuels accounts for one of the major causes of balance of payment constraints for many developing countries.

Alternative energy sources such as wind, solar, water, biogas and wood can provide appropriate technologies for the village level and contribute to self sufficiency. By helping ease some of the burdensome labor of daily life, such technologies can free people's labor and energy for other aspects of the development process.

A definition of energy is the capacity to do work. A process for considering and choosing alternative energy technologies is the following:

- 1. Decide what type of work needs to be done, eg: heating, lifting, pumping water, cooling.**
- 2. Consider all appropriate technologies for doing this work; include considerations of cost, availability of parts and materials, skills required for construction and maintenance and cultural preferences.**
- 3. Conduct a detailed cost comparison between two or three specific technologies being considered.**
- 4. Choose one plan.**
- 5. Build the project; utilize locally available materials, skills and labor when possible.**
- 6. Plan for ongoing maintenance and repair.**

Different Types of Alternative Energy:

Wind - Coastal areas tend to have consistent winds and open unobstructed areas, thus they can be good sites for wind power. Uses of wind consistent with small-scale fisheries could include: water pumps for fish cleaning and processing, for salt making, use of sail power on boats and for generation of electricity.

Sail - Sail powered fishing boats are traditionally used in many parts of Asia, the Caribbean, and more recently on the US west coast. A modern trend is towards specially designed boats with a motor/sail combination. The more streamlined sailboat design contributes to fuel efficiency, while sails can be used in favorable winds and for emergencies.

Windmills - Pumps: windmill powered water pumps are available in designs at low cost (\$600-\$800) There are numerous designs which utilize cloth sails, wood propellers, and a rotor design (savonius rotor) made of a 50 gallon metal drum. (See references for details).

Electricity Generation - Highly efficient windmills with propellor type blades can be used to generate electricity. Estimated installation and construction costs run \$1000 per kilowatt produced in size ranges of 0.5 - 30 kw. Some necessary considerations include power storage, conversion from DC to AC and inconsistent wind speeds.

Below is a sample cost comparison for a Diesel and wind powered electric generator.

	Diesel	Wind
Output	10-20 kw	10-20 kw
cost, complete and installed	\$ 9,000	\$23,000
Diesel fuel	45,000	-0-
Maintenance at \$1,000 per year	5,000	5,000
Cost over five years	59,000	28,000

Power cost per kw/hour	\$0.20 to \$0.40	\$0.10-\$0.20
------------------------	------------------	---------------

Solar Energy - Solar energy has multiple applications at varying levels of technology, from simple water heaters or food dryers to solar refrigeration systems, heating, and electricity production by photo voltaic cells.

Food preparation - see section on fish dryer.

Water heaters - Hot water heaters for personal use can be made simply by painting a small water tank black and giving it a good exposure to the sun. More elaborate hot water systems include solar collectors which store solar energy by heating water in circulating pipes fitted into a roof panel. Industrial uses of solar heated water include pre-heating in canning and bottling industries.

Refrigeration - We have discussed the desert water bag principle of solar cooling; e.g. hanging a damp cloth bag in a breezy area, while evaporation of the water lowers the temperature inside the bag. In addition, high cost prototypes of solar refrigerators and ice plants have been developed, but are still impractical for widespread application due to cost.

Electricity - Photo voltaic cells produce electricity and require little maintenance. They are however, expensive and must be imported. Cost should come down in the future however, so these may become a practical means for producing solar electricity.

Biogas - see fish silage section for description. Diesel engines on boats can be converted to run on biogas.

Water - Small hydro dams, tidal power and water wheels all have potential applications for production of electricity and for performing mechanical work. Small dams have little ecological impact and are a very efficient means of producing hydro electricity. Where

waterfalls or rivers exist, small turbines can be installed to produce low levels of electrical production (1.5 kw), or for turning water wheels. Tidal power, though not currently applicable at a low cost technology level, has possible applications through extraction by paddle wheels on floating barges in large slow moving rivers.

Wood - Efficient wood burning stoves can save many hours of labor by village women who must walk miles daily to collect fuel wood. Lorena stoves, (see reference book) provide a design for a well-insulated stove, built out of local materials which burns wood at a high level of efficiency. The design can be readily adapted to different use patterns and localities.

References:

- **Intermediate Technology and Alternative Energy Systems For Small Scale Fisheries. David B. Thomson South China Seas Fisheries Development and Coordinating Programme Manila, Philippines, 1 97 9**
- **Appropriate Technology Sourcebook Vol 1. Ken Darrow and Rick Pam. Volunteers in Asia Publication 1981**
- **Appropriate Technology Sourcebook Vol II. Ken Darrow, K. Keeler and R. Pam Volunteers in Asia Pub. 1981**
- **Hand Book of Homemade Power, Mother Earth News 1979**
- **Preserving Food By Drying. Cynthia Fahy, Carl Vogel and Per Christiansen. Peace Corps Information Collection and Exchange Manual No. M-10 1980**
- **Bio-Gas Plant, Generating Methane From Organic Wastes and Designs With Specifications. By Ram Bux Singh, Gobar Gas Research Station, AjitMal, EtaWah (U.P.)**

India, 1975

- **How to Build a "Cretan Sail" Windpump. R.D. Mann 1979. Intermediate Technology Publications Ltd.**
- **Wind and Windspinners. M. Hackleman. 1974. Peace Press, Culver City, CA.**
- **Simplified Wind Power Systems for Experimenters. Jack Park. 1975. Helion, Inc. Brownsville, Ca.**
- **A Chinese Biogas Manual. Adriane Van Buren, ed. 1976. Intermediate Technology Publications, Ltd. London**
- **More Other Homes and Garbage: Designs for Self Sufficient Living. Jim Leckie, Gil Masters, Harry White House, Lilly Young. 1981. Sierra Club Books, San Francisco, Ca.**
- **Lorena Stoves. Ianto Evans and Michael Boutette. Aprovecho Institute. 1981. Published by Appropriate Technology Project of Volunteers in Asia
- Rebecca Hoff, PCV Sierra Leone**

Session T-102: Water heater special project

Time: 10 AM

Goals:

- **To have trainees become acquainted with the necessary construction of a simple water heater**
- **To enable trainee on special project to practice technology transfer skills and to build on communication skills.**

Overview:

In this session a water heater is constructed. The purpose is to construct an appropriate technology example.

Materials and Equipment:

• Flip charts, markers, copper tubing, male-female brass fittings, 4-5 gallon steel container, flaring tool, sand, soldering torch

Procedures:

Time	Activities
2 Hours	1. Trainer and trainees construct water heater together.

Trainer's Note:

In the pilot program the technical trainer knew how to build this particular example, however any demonstration that you are familiar with will suffice.

WATER HEATER

Parts List: 1) 4-5 gallon steel drum, clean of any residue inside: chemicals, paint, oils; 2) Brass fittings/connectors (male and female) 1/2" x 3/8"; 3) Copper tubing, 7-8 feet, 1/2" x 3/8".

Tool List: 1) Cooper tubing flaring kit (to flare ends of tubing); 2) Metal punch (to make initial holes in drum); 3) Large metal punch (to increase hole size to 1/2" diameter); 4) Sand (for filling copper tubing prior to shaping loops); 5) Wrench (for tightening brass connectors); 6) log, cement pipe, metal piping, diameter 6"-8" (open end to facilitate

removal of copper tubing); 7) Gas torch, brazing rod (for welding brass connectors to steel drum).

Construction of Water Heater:

Punch two holes in steel drum. Both should be centered - one 2" above the bottom of the drum, the second hole 4" above the first. Holes should have an inner diameter of 1/2"-5/8", so as to facilitate insertion of the male brass connectors prior to welding. The welding process is technical and someone skilled in it should be contacted to do the actual brazing of the brass connectors to the steel drum. The process can be done on the outside of the drum. The copper tubing will come in either straight lengths 8'-10' or coils. If tubing is coiled, it should be straightened carefully. The straightened tubing should then be filled with sand, a center point (3 1/2 feet on 7' length) located and marked. Next, the tubing filled with sand (to prevent collapse of the copper) is wrapped around the open-ended log/pipe. Step 1. Wrap the copper around the pipe, carefully holding the copper tight against the pipe. Steps 2 and 3. Continue the wrapping process taking one end of the copper tubing and carefully bending around the pipe. Step 4. Finish the bending by taking the other copper end and wrapping it so the two ends are parallel and pointing in the same direction. Step 5. Bend ends so they complete a second loop, but run parallel together away from coil. Step 6. Copper tubing is now ready to have both ends flared. Use the flaring tool kit to flare both ends. Prior to flaring, the female brass connector should be inserted onto the copper tubing. Copper tubing is now ready to be connected to the steel drum. Step 7. Attach the female connectors on the copper coil to the male connectors on the steel drum. Some adjustment of the spacing of the copper ends will be necessary. Carefully bend the copper to the required spacing and connect.

Always insure water is in the steel drum when copper coil is over a fire. Cooking can be done in the steel drum, but wire screens should be placed over the connector openings in the drum to prevent clogging of food.

Trainer's Note:

Reference should be made to the lack of adequate supplies of hot water in rural areas of developing countries. This water heater, simplistic in design, can be the beginnings of a cottage industry.

--Steven Martinson, Technical Trainer, Pilot Program --Mario Teisl, PCV Papua New Guinea

Session T-103: Wellness

Time: 4 PM

Goals:

- **To enable trainees to see that they are responsible for their wellness as volunteers**
- **To introduce the topic of stress and its effects on our wellness**
- **To have trainees identify ways in which they can deal with stress**

Overview:

In this session trainees are asked to read article "Plain Talk" about stress, National Institute of Mental Health. They are then asked to come up with some concrete ways that they could handle stress as a volunteer.

Materials:

- **article "Plain Talk" about Stress, flip chart, markers**

Procedures:

Time	Activities
15	1. Trainer passes out article "Plain Talk" about Stress , asks trainees to take next 15

Minutes	minutes to read article.
5 Minutes	2. Trainer now asks participants what one thing hit them about the article, records statements on news print. Trainer then makes points about stress being one of the major factors in illness and that awareness leads to prevention.
20 Minutes	3. Trainer now asks small groups to take the 10 points for living with stress, plan a strategy for using each, points to your advantage as a volunteer. List strategies on newsprint. If trainees can think of other points they should also list these.
5 Minutes	4. Small groups report back to larger group.
5 Minutes	5. Trainer points out how important it is to record these strategies In their journals and refer to them from time to time. Living and working in a new culture will be stressful, but by dealing with the stress, they will be able to turn stress into a positive force in their volunteer service.

"PLAIN TALK" about STRESS

National Institute of Mental Health

A 19-year-old girl learns her boyfriend has been killed in an auto accident,

A businessman loses an important business deal to his competitor.

An athlete receives a first-place award for his efforts in a track event.

A 15-year-old boy approaches a girl to ask her out for the first time.

What do all of these people and situations have in common? STRESS. This may surprise you because the last two situations both involve happy events. The fact is that it doesn't matter whether the situation is pleasant or unpleasant, according to Hans Selye, M.D. What counts is the intensity of the demand it places on you to readjust. Mr. Selye, a Montreal, Canada, physician and author of several books on stress, calls these incidents "stressors."

He states that the physical reaction of the body to stress is basically the same, regardless of the stressor. Furthermore, he feels that the only complete freedom from stress is death. Humans thrive on stress because it makes life more interesting.

No matter what you are doing, you are under some amount of stress. Even while you sleep, your body must continue to function and react to the stress imposed by dreaming. Stress comes from two basic forces-the stress of physical activity and the stress of mental/emotional activity. It is interesting to note that stress from emotional frustration is more likely to produce disease, such as ulcers, than stress from physical work or exercise. In fact, physical exercise can relax you and help you deal with mental stress.

Stress or Distress

Then would it be true to assume there is no such thing as bad stress? Dr. Selye feels that there is a type of stress that can be harmful. He calls it distress. Distress is continual stress that causes you to constantly readjust or adapt. For example, having a job you do not like can be constantly frustrating, and frustration is "bad" stress. If this distress lasts long enough, it can result in fatigue, exhausting, and even physical or mental breakdown. The best way to avoid it is to choose an environment that allows you to do the activities you enjoy, that are meaningful to you. Your friends, your work, and even your future mate can be sources of challenging good stress or harmful distress.

Mr. Selye also believes that the absence of work is not necessarily a way to avoid stress. An example of this is the retired person who has nothing to do. Boredom then becomes an enemy capable of causing tremendous distress. Work is actually good for you as long as you can achieve something by doing it. It will only wear you out if it becomes frustrating because of failure or a lack of purpose.

To avoid distress, you should seek work or tasks that: a) You are capable of doing, b) You really enjoy, c) Other people appreciate.

Body Reactions to Stress

Regardless of the source of stress, states Dr. Selye, your body has a three-stage reaction to it.

Stage 1 - Alarm

Stage 2 - Resistance

Stage 3 - Exhaustion

In the alarm stage, your body recognizes the stressor and prepares for fight or flight. This is done by a release of hormones from the endocrine glands. These hormones will cause an increase in heartbeat and respiration, elevation in blood sugar level, increase in perspiration, dilated pupils, and slowed digestion. You will then choose whether to use this burst of energy to fight or flee.

In the resistance stage, your body repairs any damage caused from the stress. If, however, the stressor does not go away, the body cannot repair the damage and must remain alert.

This plunges you into the third stage-exhaustion. If this state continues long enough, you may develop one of the "diseases of stress," such as migraine headaches, heart irregularity, or even mental illness. Continued exposure to stress during the exhaustion stage causes the body to run out of energy, and may even stop bodily functions.

Since you cannot build a life completely free from stress or even distress, it is important that you develop some ways of dealing with stress.

Getting a Handle on Stress and Distress

Recognizing that stress has a lifelong influence on you, what can you do about handling it?

Doctors have come up with a few suggestions on how to live with stress.

1. Work off stress--If you are angry or upset, try to blow off steam physically by activities such as running, playing tennis, or gardening. Even taking a walk can help. Physical activity allows you a "fight" outlet for mental stress.

2. Talk out your worries--It helps to share worries with someone you trust and respect. This may be a friend, family member, clergyman, teacher, or counselor. Sometimes another person can help you see a new side to your problem and thus, a new solution. If you find yourself becoming preoccupied with emotional problems, it might be wise to seek a professional listener, like a guidance counselor or psychologist. This is not admitting defeat. It is admitting you are an intelligent human being who knows when to ask for assistance.

3. Learn to accept what you cannot change--If the problem is beyond your control at this time, try your best to accept it until you can change it. It beats spinning your wheels, and getting nowhere.

4. Avoid self-medication--Although there are many chemicals, including alcohol, that can mask stress symptoms, they do not help you adjust to the stress itself. Many are habit-forming, so the decision to use them should belong to your doctor. It is a form of flight reaction that can cause more stress than it solves. The ability to handle stress comes from within you, not from the outside.

5. Get enough sleep and rest--Lack of sleep can lesson your ability to deal with the stress by making you more irritable. Most people need at least seven to eight hours of sleep out of every 24. If stress repeatedly prevents you from sleeping, you should inform your doctor.

6. Balance work and recreation--"All work and no play can make Jack a nervous wreck."

Schedule time for recreation to relax your mind. Although inactivity can cause boredom, a little loafing can ease stress. This should not be a constant escape, but occasionally, you deserve a break.

7. Do something for others--Sometimes when you are distressed, you concentrate too much on your self and your situation. When this happens, it is often wise to do something for someone else, and get your mind off of yourself. There is an extra bonus in this technique--it helps make friends.

8. Take one thing at a time--It is defeating to tackle all your tasks at once. Instead, set some aside and work on the most urgent.

9. Give in once in a while--If you find the source of your stress is other people, try giving in instead of fighting and insisting you are always right. You may find that others will begin to give in, too.

10. Make yourself available--When you are bored and feel left out, go where the action is! Sitting alone will just make you more frustrated. Instead of withdrawing and feeling sorry for yourself, get involved. Is there a play or musical coming up? Chances are they will need help back stage. Get yourself back there and somebody will probably hand you a hammer or paint brush.

Reprinted with permission from CURRENT HEALTH, 501 Lake Forest Ave., Highwood, IL 60040. Further reproduction is prohibited without permission of the publisher.

Recognizing stress as an ongoing part of life may well be the first step in dealing with it. Turn stress into a positive force and let it make life more interesting.

DHEW Publication No. (ADM) 78-502 May 1977

Session T-104: Professional approaches to interaction with host country officials**Time: 7:30 PM****Goals:**

- **To help trainees adopt a professional demeanor when interacting with host country officials**

Overview:

Through a series of role plays and the processing of those role plays, trainees will come to understand the importance of interacting professionally with host country officials.

Procedures

Time	Activities
1 Hour 30 Minutes	1. Trainer introduces a series of role plays, and trainees take on roles of volunteers to practice professional interactions.

Trainer's Note:

The important part of this exercise is the processing. Sample role plays are attached, although you may want to write your own based on actual experiences.

Sample Role Plays

1. **Female PCV marine fisheries extensionist goes to see Chief Fisheries Officer with her monthly report. He's more interested in her, than in her monthly report.**

2. PCV marine fisheries extensionist goes to see the Permanent Secretary for the Ministry of Agriculture and Natural Resources about a matter concerning his/her project. The meeting is constantly interrupted by telephone calls and messages. Little is accomplished.

3. PCV marine fisheries extensionist arrives at new site where he/she is to work with two experts (expatriate) with an international development agency. Their plans for the work he will be doing are much different from what the PCV had in mind. They see the PCV as a "logistics coordinator" and office assistant. (This role play emphasizes the importance of role clarification by the PCV on Day 1 of arrival at a new site.)

4. PCV marine fisheries extensionist and counterpart (i.e, Chief Fisheries Officer) admire the deep line reel the PCV and local fishermen have constructed out of scrap lumber. The Permanent Secretary arrives on an official visit to see the PCV's project, sees the deep line reel and asks the PCV if it is what American fishermen use to catch fish. The PCV tries to explain "appropriate technology" - with no support from his/ her counterpart.

2. Trainer takes part in role plays. After each role play trainer processes the experience with the trainees.

Session T-105: Fisheries statistics

Time: 7:30 AM

Goals:

- Develop a conceptual framework for understanding factors which affect fish population structure**
- Review some management strategies for effective exploitation and conservation of stock**

Overview:

During this session an outside lecturer is invited to review and critique methods for estimating population size, to examine factors affecting fish populations and to tell trainees how to recognize overexploitation. Lecturer will also describe creel survey design to collect essential information. Further, lecturer discusses management philosophies and different approaches. The conclusion of lecture describes difficulties of obtaining statistical data from small-scale fishermen in developing nations. At the conclusion of the lecture, trainees will have a brainstorming session of at least three procedures, using parallel experience, common sense and technical information. They will also brainstorm advantages/disadvantages of these procedures. This session concludes with a question and answer period.

Exercises:**1. Lecture/Brainstorming/Question and answers****Materials:**

- **Flip chart paper, markers, tape**

Trainer's Note

This area is highly specialized and requires someone who is well versed in the subject, but also understands the problems involved in the collecting of statistical data from small-scale fishermen. If there is no one available with the sensitivity to present the subject from the viewpoint of a developing nation, it is best to omit session.

EXERCISE 1 - Fisheries Statistics

Procedures:

Time	Activities
1 Hour	1. Lecture by statistical expert. Outline as follows:

Fishermen have been interacting with the sea for thousands of years. In their attempts to wrest a living from it, they have made influences from their observations and constructed taxonomics and theories concerning the environment of the sea and its flora and fauna. Not all conclusions may be adequate, their observations of correlations and variability within the sea are usually accurate since their livelihood depends on the ability to locate fish of specific types.

Basic Models for the assessment of fish stocks

+ the empirical

- Schaefer production model (1954, 1957)

+ analytic constant - recruitment

- Beverton and Holt model (1957)

All other models are permutations, variations, simplifications and/or improvements of the basic material.

Static procedures are primarily applicable to estimating future yields in incipient fisheries. The "dynamic" procedures are mostly for ongoing fisheries or for newly created fisheries where adequate catch, effort, and biological data exist or are obtainable.

1. Static procedures

a. Estimate catch potential from behavior of similar ecosystems for which data are

available and simultaneously estimate the effort (or numbers of fishermen) that the stock can support.

b. Estimate potential catch from measurement of standing crop (with variations perhaps allowing 30 to 50% of the stock to be available for annual harvest.)

c. Estimate potential catch by application of existing, adapted or newly developed indices morphoedaphic for lakes, Inundation zone extent or floodwater volume in large rivers, etc.

2. Dynamic procedures

Use, adapt, or develop new models for maximum sustainable yield (e.g. Schaeffer, Beverton and Holt) when catch, effort and supporting biological data are available or obtainable, as in ongoing fisheries.

- Small-scale fisheries are bona fide fisheries involving the need for resource identification, harvesting, processing, marketing and management.

- Why are age and growth of fish important statistical data for fishermen. What the data tells.

Criteria for validating age marks

Not all are applicable in every case.

1. Length - frequency analysis of a population sample, Peterson method.

2. Model - progression analysis in a time series of population samples.

3. Comparison with growth rates derived from tag-recapture data or growth in captivity.

4. Determination of the period and timing of mark formation. This is usually carried out by a qualitative and quantitative examination of the margin of the scales, bones, or otoliths in

samples taken in different times of the year. This may require special collecting efforts.

5. Determination of the proportionability of growth of the aging structure and length or weight of the fish. Once a relationship is established and mathematically or graphically described, measurements to earlier formed time marks can be used to back calculate the growth history of individuals. A growth curve constructed from the data should approximately conform to the curve derived from ages of fish at the time of capture.

6. Comparison of ages derived from different structures, e.g. scales vs otoliths.

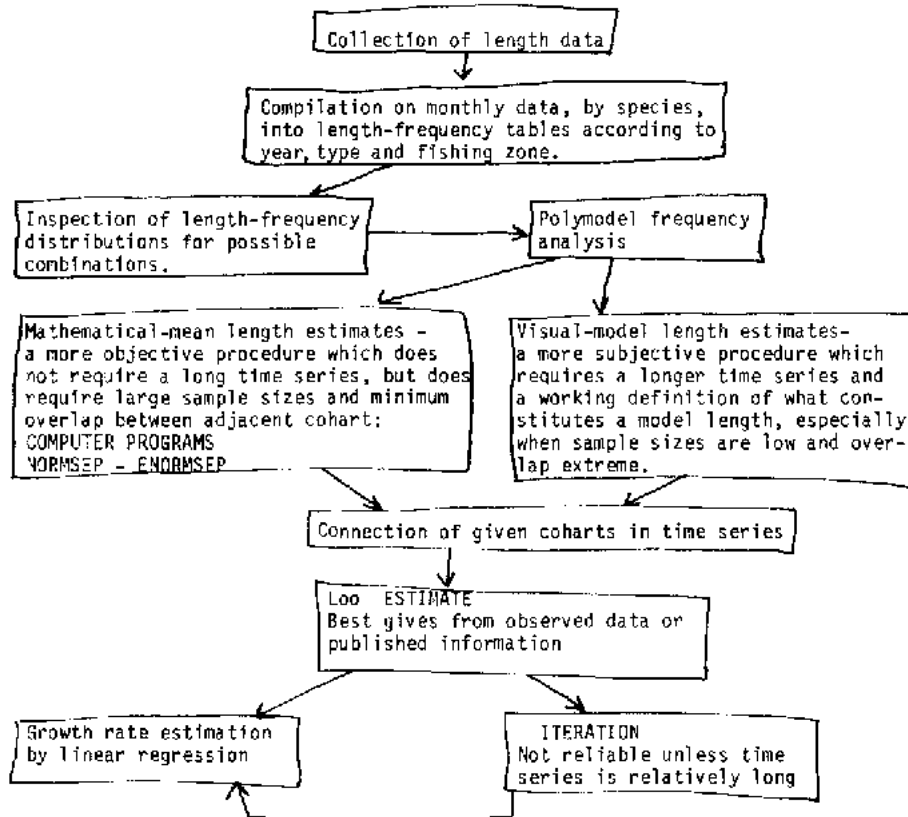
7. Tag and recapture studies where the calcified structure itself is also marked, using chemicals such as 45 CA (Erie, 1960) lead (Ickekawa and Hiyama, 1954) or tetracycline (Weber and Ridgeway, 1967; Jones and Bedford, 1968). Here the numbers of marks between the chemical tag and the margin is compared to the known elapsed time period. This is a powerful tool, but it requires a large effort in time, energy and money. An easier but related method simply compares the number of annual or seasonal zones on fish of known age. This may be accomplished by tag release where age is known (e.g. for young of the year) or by holding the fish in captivity of some sort. All of these techniques require relatively long periods of time before results are meaningful, and they are also subject to the various biases introduced by tagging and/or artificial confinement. William and Bedfore (1975) and Poinasad and Trooder (1966) point out an analogous validating technique which relies upon recognition of unusual zones formed in particular years. These marks may be used as a reference point for subsequent counts.

8. Comparison of the empirically derived growth curve to mathematical formulations such as non-Bertalanffy growth curve. This is only one of several possible comparisons. (Ricker, 1979). All have different biological and non-biological assumptions and a particular one will usually fit the data better than others. However widely deviant empirical patterns should be suspect.

9. Correlation of the time of mark formation with various exogenous and endogenous cycles such as temperatures, salinity, rainfall, feeding intensity, condition, or reproductive activity. Correlation will not establish a causative relation but this method will at least help establish a biological basis for the observed periodically marked structures.

10. Establishment of objective criteria to discriminate marks; avoidance of bias by aging fish without knowing their size, and comparison between readers for consistency.

Schematic diagram showing series of steps leading to estimation of instantaneous growth rates from length-frequency data.



Figure

Focusing on the act of data collection, we see the need to engender trust, show clear intent, indicate utility to fishermen, use proper code (language), setting, vehicle, opinion

leaders, etc. For example, research shows that local taxonomies of species are complete, complex and repeatable.

Information from fishermen can be difficult to obtain and biased. However, there is a great amount of historical information held by fishermen; it is expedient to use it.

1 Hour	2. Group is now asked to break into small groups, each group takes one of the procedures described in lecture and brainstorms the following areas, putting findings on flip chart paper:
	a. one of the procedures described in lecture and its possible utilization to small-scale fishermen
	b. advantages/disadvantages of each including assumptions
	c. equipment, personnel needed, cost - trainees should provide as much detail as possible utilizing parallel experience and common sense
15 Minutes	3. Trainees now make a list of questions to ask lecturer based on discrepancies generated during brain storming session.
45 Minutes	4. Lecturer now responds to list of questions.

Session T-106: Country specific slides

Time: 7:30 PM

Trainer's Note:

During this session some slides that are country specific are desirable. During pilot program slides were shown with very little explanation.

Session T-107: Aquaculture special project and field trip

Time: 7:30 AM

Goals:

- **To acquaint trainees with the basic principles of small-scale fish farming**
- **To provide trainees with enough background information on aquaculture to conduct a preliminary feasibility study for the area where they will be working**
- **For the trainee doing aquaculture as a special project (see Activity 1) to build on communication/technology transfer skills**

Overview:

It is not expected that trainees will be "experts" on aquaculture after this session. Rather, it is hoped that the two activities in this session will provide trainees with enough of a framework to determine if aquaculture would be technically and economically feasible in their project area.

Exercises:

- 1. Special Project**
- 2. Field Trip**

Materials:

- **Flipcharts, marking pens**

References:

- **Freshwater Fisheries: Program Planning, Peace Corps**
- **Freshwater Fish Pond Culture and Management, Peace Corps**

EXERCISE 1 - Special Project on Aquaculture Total Time 1 Hour

Overview:

one major purpose for this exercise, aside from it being a special project, is for the trainees to generate a solid list of questions - along with observations they hope to make for the field trip which follows.

Procedures:

Time	Activities
15 Minutes	1. Trainee gives a lecture on the basic principles of aquaculture, including stocking, feeding, harvesting, and fish farming economics.
15 Minutes	2. Trainee divides the group into small groups of three or four to make a list of specific questions for the field trip around stocking, feeding, and harvesting of fish and the economics of fish farming. Groups report out to large group.
15 Minutes	3. Trainee draws closure to the exercise by going back over his/her special project goals.
15 Minutes	4. Trainer links the exercise to the field trip, and concludes with transportation instructions.

EXERCISE 2 - Aquaculture Field Trip

Total Time: 3 Hours

Overview:

In this exercise, trainees have the opportunity to visit a fish station, or a private fish farm, to see firsthand the construction-specifics of fish ponds and the irrigation requirements. In addition, trainees hear from the station manager or fish farmer about day-to-day operations, responsibilities and fish farming economics and marketing.

Procedures:

Time	Activities
1 Hour	1. Question and answer period with station manager or fish farmer.
1 Hour	2. Station manager or fish farmer explains layout of station or farm, showing trainees the irrigation system, breeding ponds and feeding methods. Informal question and answer time.
30 Minutes	3. Trainer reviews what has been seen, mentioning high lights, and does linkage to past and future sessions.

Session T-108: Culture shock

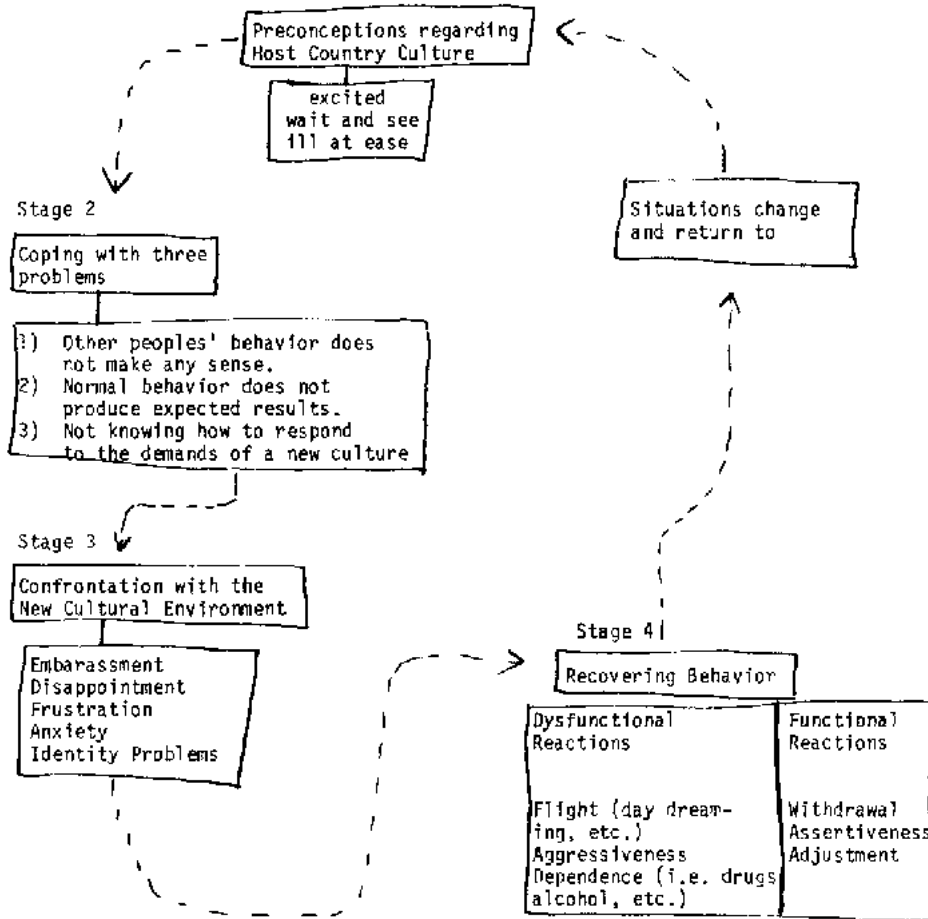
Time: 7:30 PM

Overview:

Most trainees, when they leave SST for their countries of assignment, will undergo intensive language training in-country for one or two months. It is during this period of time, as they are adjusting to a new environment and struggling with learning a new language, that they will be particularly vulnerable to culture shock. In this session, trainers have an opportunity to talk about their own experiences with culture shock.

Procedures:

Time	Activities
10 Minutes	1. Trainer gives brief introduction and goes over goals. Reminds trainees that this subject has been covered before, but now they are almost ready to go to their sites for two years of volunteer service. Trainer then goes over the following stages (see attached).
	2. Trainer asks trainees to break into groups of five or six and discuss each stage. The following in particular should be covered:
10 Minutes	a. ways to cope with the problems in stage two
10 Minutes	b. feelings that will be generated during stage three
10 Minutes	c. the inevitable reactions in stage four
20 Minutes	3. Trainer tells each group to now make a list on newsprint of their fears and their hopes. (i.e. to fail, to hurt people, to help others, to be successful...)
20 Minutes	4. Trainer now hands out "check list" for fears and hopes (see attached). Trainees discuss their lists using the check list.
5 Minutes	5. Each group is asked to prepare a statement to give
per group	to the large group, highlighting the small group discussion including points they would like to stress.
15 Minutes	6. Trainer now does summary of exercise, picking up points that have been raised during the presentation. Adds own experiences which are appropriate to alleviate fears that have been raised.



The culture shock process

Check List for Fears and Hopes

- 1. Are the fears and hopes realistic or not? (Let's find out through concrete examples.)**
- 2. What is the cultural dimension of each fear and hope? (From where are those fears and hopes coming?)**
- 3. What can be done to overcome the fears if necessary and build upon the hopes?**
 - a. The anticipated negative responses from others: are they real or imaginary?**
 - b. The obstacles which prevent the implementation of what people wish to do but do not do.**
 - c. The required modifications for making ideas acceptable?**

Session T-109: Final interviews

Time: 7:30 AM

Goal:

- To conduct final interviews with trainees**

Overview:

This is the final interview with trainees. Last chance for coaching. Trainees will definitely be praised for good work and positive skills.

Procedures:

Time	Activities
2 Hours	1. Same as other interviews except trainers may choose which trainees to interview. It is suggested that those trainers with whom trainees identify most closely interview those trainees. Solid feedback should be given. Well thought out areas that trainees need to work on should be given to trainees.

Session T-110: Training closure**Time: 5:30 PM****Goals:**

- **To review learnings of the past eight weeks**
- **To go trainees' expectations for training from**

Session 1

- **To discuss last minute logistics for trainees' graduation ceremony and departure**
- **To go over the goals of training from Session 1**
- **To relax and have fun**

Overview:

This session draws closure to the eight weeks of technical training. Trainers put back on the walls the following newsprint from Session 1 and from the orientation:

Fisheries Training Goals**Trainee expectations for technical training**

Trainee aspirations for Peace Corps service from the Orientation

Trainee newsprint drawings from Orientation on how they see themselves in their new communities overseas

It is important for trainers and trainees to go back over these newsprint, in order to show trainees what they didn't know when they came to Peace Corps training and what they now know. It is also a time for trainers to talk some about in-country language training, the next hurdle for trainees before they become Peace Corps Volunteers. Finally, this session is an appropriate time to go over the last minute logistics for the graduation ceremony and for trainee departure (travel money can be passed out, etc.).

Materials:

- **Newsprint from Orientation:**

Trainee Aspirations, Drawings by trainees of themselves

- **Newsprint from Session 1:**

Training goals, expectations

- **flipchart and marking pens**

Procedures:

Time	Activities
5 Minutes	1. Trainer introduces the "agenda" for the session. Asks if any additions.
15 Minutes	2. Trainees read out their aspirations from the newsprint... their expectations for Peace Corps Training. Discuss what has been met and what hasn't.

5 Minutes	3. Trainer goes over last minute logistics.
5 Minutes	4. Trainer discusses briefly in-country language training: what it will be like.
10 Minutes	5. Trainer goes over the goals of training.
	6. (optional) Graduation B-B-Q at trainers' house. Slides are shown from past eight weeks.

Trainer's Note

It is important to re-stress during the read-out of trainees' expectations that eight weeks of training is not enough time to cover everything, We can't make them experts in Diesel mechanics or fish identification: It's up to them to make themselves experts.

Finally, closure is as important as the opening session. Regardless of how frazzled trainers are, be energetic and pleasant one more time.

Session T-111: Graduation ceremony

Time: 1 PM

Overview:

The graduation ceremony belongs to the trainees. They plan it; they line up speakers; they invite the people they wish to attend (see attached invitation from the pilot program).

One major contribution to the ceremony made by the training staff is the "Certificate of Completion". (See attached certificate from the pilot program.) This certificate is the

trainees' "non-verbal credential" at their sites. It should hang on the wall of their fisheries extension office or in their house. Such certificates are extremely important in developing countries.

Asociación Pescadores de Puerto Real
"Perfection And Dedication Equals Production"

Certificate of Completion

Presented to _____

For successfully completing an intensive training course in

Marine Fisheries Technology

Given in Cabo Rojo, Puerto Rico, on November 21st, 1982

President

Technical Director

Treasurer

Training Director

President, Technos Corporation

Certificate of Completion

Since 1961 when the Peace Corps was crested, more than 80,000 U.S. citizens have served as Volunteers in developing countries, living and working among the people of the Third World as colleagues and coworkers. Today 6000 PCVs are involved in programs designed to help strengthen local capacity to address such fundamental concerns as food production, water supply, energy development, nutrition and health education and reforestation.

Peace Corps overseas offices:

BELIZE P.O. Box 487 Belize City

BENIN BP 971 Cotonou

BOTSWANA P.O. Box 93 Gaborone

BURKINA FASO BP 537 Ouagadougou

BURUNDI BP 1720 Bujumbura

CAMEROON BP 817 Yaounde

CENTRAL AFRICAN REPUBLIC BP 1080 Bangui

COSTA RICA Apartado Postal 1266 San Jose

DOMINICAN REPUBLIC Apartado Postal 1412 Santo Domingo

EASTERN CARIBBEAN Including: Antigua, Barbados, Grenada, Montserrat, St. Kitts-Nevis, St. Lucia, St. Vincent, and Dominica Peace Corps P.O. Box 696-C Bridgetown, Barbados West Indies

ECUADOR Casilla 635-A Quito

FIJI P.O. Box 1094 Suva

GABON BP 2098 Libreville

GAMBIA, The P.O. Box 582 Banjul

GHANA P.O. Box 5796 Accra (North)

GUATEMALA 6 tat Avenida 1-46 Zone 2 Guatemala City

HAITI c/o American Embassy Port-au-Prince

HONDURAS Apartado Postal C-51 Tegucigalpa

JAMAICA 9 Musgrave Avenue Kingston 10

KENYA P.O. Box 30518 Nairobi

LESOTHO P.O. Box 554 Maseru

LIBERIA 80x 707 Monrovia

MALAWI Box 208 Lilongwe

MALI BP 85 Bamako

MAURITANIA BP 222 Nouakchott

MICRONESIA P.O. Box 9 Kolonia Pohnpei F.S.M. 96941

MOROCCO 1, Zanquat Benzerte Rabat

NEPAL P.O. Box 613 Kathmandu

NIGER BP 10537 Niamey

PAPUA NEW GUINEA P.O. Box 1790 Boroko Port Moresby

PARAGUAY c/o American Embassy Asuncion

PHILIPPINES P.O. Box 7013 Manila 3120

RWANDA BP 28 Kigali

SENEGAL BP 2554 Dakar

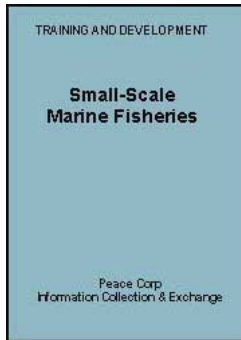
SEYCHELLES Box 564 Victoria

MAHE SIERRA LEONE Private Mail Bag Freetown

SOLOMON ISLANDS P.O. Box 547 Honiara
SRI LANKA 50/5 Siripa Road Colombo 5
SWAZILAND P.O. Box 362 Mbabane
TANZANIA Box 9123 Dar es Salaam
THAILAND 242 Rajvithi Road Amphur Dusit Bangkok 10300
TOGO BP 3194 Lome
TONGA BP 147 Nuku' Alofa
TUNISIA BP 96 1002 Tunis Belvedere Tunis
WESTERN SAMOA Private Mail Bag Apia
YEMEN P.O. Box 1151 Sana'a
ZAIRE BP 697 Kinshasa



[Home](#) > [ar](#).[cn](#).[de](#).[en](#).[es](#).[fr](#).[id](#).[it](#).[ph](#).[po](#).[ru](#).[sw](#)




 **Small-Scale Marine Fisheries - A Training Manual (Peace Corps, 1983, 631 p.)**


 *(introduction...)*


  **Small-scale marine fisheries: An Extension Training Manual**


 **Week 1: Orientation**

 **Week 2: Orientation**


 **Week 2: Training**

 **Week 3: Training**

 **Week 4: Training**

 **Week 5: Training**

 **Week 6: Training**

 **Week 7: Training**
Week 8: Training**Small-scale marine fisheries: An Extension Training Manual**

This fisheries training manual has been developed for use in preservice training of prospective Volunteers whose Peace Corps service will be spent working with small-scale, artisanal fishing communities in developing nations. The module, or design, lends itself to both single-country or multicountry use.

The technical content of the training design was well researched in the field. One member of the design team spent 8 months overseas in 1980-81, researching the needs of small-scale artisanal fishing communities and meeting with ministry officials from various countries with and without existing Peace Corps programs. In September of 1982, the design team met in Boqueron, Puerto Rico, with the Fisheries Programming and Training Specialist from Peace Corps/Washington. He had just returned from 4 months in the field meeting with various Peace Corps staffs in 8 countries of the three regions Peace Corps serves, to determine the role of Volunteers in marine fisheries programs and to ascertain the types of training future Volunteers would need to maximize their effectiveness. After reviewing the task analysis, it was decided that the training format used by Peace Corps' Forestry Sector for its preservice training of forestry Volunteers would be best suited in meeting the objectives of the marine fisheries training design.

Each session of this training program builds towards or from the one(s) preceding and following it. However, with minor modification, sessions may be used independently.

The suggestions for timing, location and administration of the sessions are drawn from the results of the field testing done during the pilot training program. While the constraints of your setting may require modifying these guidelines, we suggest that special consideration be given to each of these categories, so that training programs may be of

the greatest benefit to the prospective marine fisheries Volunteer.

This training program is based on the experiential learning model. The elements of each session are: the experience itself, the processing of the experience by the trainers; the generalization of the learning by the trainees; the application of the learning; summarizing; and, finally, the linking of the experience to the next session.

Training Program Overview

The general purpose of this training program is to prepare prospective Peace Corps Volunteers who will serve in small-scale, artisanal fishing communities in developing nations. This program is an eight week intensive training program designed to build trainees competence in marine fisheries technology and fisheries extension work. Further, the program helps trainees build confidence in their own abilities to transfer skills and knowledge. The technical training is experiential; trainees learn by doing rather than by being told a series of "how to's".

It is important to note that this training program puts heavy emphasis on the economic development of small-scale and subsistence-level fishermen. The trainees from this program will be involved as extensionists on the community level and thus will be in direct contact with fishermen and their families on a daily basis. This front-line contact gives the PCV exposure in which to act as a valuable resource, not only in the realm of fishing and related support areas, but also in other income generating projects which will improve the standard of living of the fishing family, i.e. improved fish smokers and solar dryers, salt-making, alternative energy production from fish silage, gardening and handicraft development.

Throughout the pilot program the trainees understood the value of the communication exercises, cultural awareness exercises and community analysis. We were certain that conducting the pilot program in Puerto Rico contributed greatly to their immediate

acceptance of extension skill-building and practice.

There is at the beginning of training an orientation to Peace Corps. In this orientation, trainees learn about Peace Corps policies, explore their aspirations for Peace Corps service, use the "Cross-Cultural Workbook" from the CAST model, and do exercises that give them insight into the role of the Volunteer as a development worker.

The next phase of the program is field placement (or family live-in). The trainees are placed at different sites with commercial fishing families. While at the site, trainees are given two tasks: to collect as much data as possible using the social cybernetics sub-systems (see Community Analysis, Session T-31); and, based on their observations, to formulate a list of technical skills they believe they will need to be an effective marine fisheries PCV. Learnings that were generated by the field placement were:

- the importance of language; _ the importance of non-verbal communication; _ different concepts of privacy;**
- differences in the roles between men and women;**
- overwhelming hospitality, and how one deals with that;**
- observation of local fishing practices and marketing structures; and,**
- the government official from Washington being viewed as the solver of all problems in the community.**

All of the trainees in the pilot program saw the "live-in" as a positive experience. The staff believes that the live-in set the stage for the rest of training: it provided the trainees with a frame of reference both technical and cross-cultural - on which to build throughout the duration of the training program. During this live-in trainees can test their emotional readiness to live and work in a different culture.

The introduction to fisheries technology starts with the trainees being introduced to Diesel and outboard engines. Here, major emphasis is given to proper maintenance practices.

Trouble-shooting is also thoroughly covered. Next, the trainees learn net mending; and, over the remaining weeks of training, they will continue to mend nets, using various techniques of knot tying. The next seven weeks of training will include the following technical areas:

- fish preservation and processing;**
- fishing gear;**
- fish economics, marketing and income generation;**
- extension;**
- nutrition and fish culinary skills;**
- navigation and seamanship;**
- boat building, maintenance and construction;**
- aquaculture; and,**
- proposal writing and fund raising.**

In addition, special projects are assigned to trainees in all of the above areas.

Intertwined with technical training are communication skills, team building, group process, community analysis, and core curriculum exercises, as well as individual problem-solving exercises.

The identification and practice of skills developed and areas of personal growth will be useful to the trainees in their role as Peace Corps Volunteers. The identification of areas of accomplishment will aid trainees in acquiring confidence for a successful service. All sessions, exercises, special projects, and skills practice are directed toward the practical application in their work as Volunteers.

Finally, participants are made aware from the first session that they are responsible for their own learnings. What we have done in this training program is to provide them with the opportunity for educational enhancement and skills development. In the process, they

are afforded the chance to examine what commitment means as a Peace Corps Volunteer.

Training Program Goals

The design of the fisheries extension training program is such that upon completion, the trainee will be provided technical information, knowledge and skills, facilitating productive and satisfying Peace Corps Volunteer service.

Specific training goals are:

- to enable trainees to recognize their skills and to feel competent in the use of those skills;**
- to teach trainees how to transfer the technical skills they have to others;**
- to identify and improve skill areas that need strengthening;**
- for trainees to understand their role as fisheries extension Peace Corps Volunteers in their host country;**
- to help trainees identify and find resources available to them at their community sites and host country agencies;**
- the illustration of competency in fisheries extension techniques, in fish processing, fish preservation, outboard/Diesel repair and maintenance, fisheries economics and marketing, small-scale fishing and fishing vessels, and vessel repair and construction;**
- the ability to analyze properly communities' social systems, which should identify problems and help communities seek solutions;**
- an understanding of the basic theories of fisheries extension work;**
- increased interpersonal, team building and communication skills; and,**
- a better understanding of global and country-specific fisheries issues.**

Each session's objectives and activities will be described to trainees at the start of the session.

Advance Information

Before training starts, country-specific information for each country with trainee assignments need to be obtained from the Country Desks at PC/Washington. The optimum plan would be to have the Desk Officer or an RPCV from that country come to training during orientation to give a country overview. It is also helpful to have the Desk Officer at orientation to discuss specific country policies, as well as Peace

Corps policies. If it is not possible to have any of the above, the Desk Officer should send slides, movies and any written materials they may have for the staff to use. It is wise to discuss with the Desk Officer any special concerns that they may have about trainees entering the host country, and to find out if there are any unique situations that trainees should be prepared for.

The training staff of the pilot program felt very strongly that the trainees were not only being trained as volunteers but also as professionals. Consequently, they established a dress code for marine fisheries volunteers. In the past, volunteers have not always been as careful about their dress as they could have been. In order for our trainees to be accepted as professionals we felt they not only had to perform as professionals would, but also dress the part as well. We felt that by establishing this dress code and enforcing it during training that trainees would become familiar with - and hopefully continue to use appropriate dress throughout their volunteer service. The following dress code should be sent out by the Country Desk Officer with the invitation to training. Please check to see if this has been done. If not, it should be done immediately.

Peace Corps training is the appropriate place to instill the appropriate image of the PCV development worker. Throughout the eight week duration of the training program, trainees need to be given feedback by the training staff on their professional appearance, or lack of it. Para-military clothes, T-shirts and jogging shorts are not appropriate attire

for the PCV development worker. Men must keep their hair, and beards and mustaches neatly trimmed, and/or clean shaven. Women with medium to long hair styles must keep their hair up. Peace Corps will never be seen by the host country as a serious development organization if its volunteers dress as if they were on their junior year abroad, or worse.

What to Bring - Peace Corps Training and Volunteer Service

The following is a listing of items, clothing in particular, that prospective volunteers should bring with them to the training program and for their volunteer service overseas.

For both men and women:

- a small, two blade pocket knife;
- a small, waterproof day pack;
- a pair of polarized sunglasses;
- a hat (for sun);
- two towels;
- tennis shoes or deck shoes;
- one pair of canvas work boots;
- two pairs of work pants;
- cotton underwear;
- cotton-poly blend socks;
- bathing suit;
- a light weight jacket;

For men:

- pants (Levis are ok, but they're hot. 50/50 cotton blend is best);
- two work shirts;
- two dress shirts (short-sleeved);

- **knit shirts with collars;**
- **light weight sport coat;**
- **one tie; and,**
- **two dress walking shorts (for when on boat only).**

For women:

- **loose skirts (below knee);**
- **cotton blouses (modest);**
- **cotton dresses;**
- **cotton bras;**
- **cotton slips; and,**
- **cotton nightgown or robe.**

Please note: Para-military clothes, jogging shorts, and T-shirts are not appropriate attire for the Peace Corps Volunteer development worker.

Getting Ready

There are several preparatory steps that must be taken in order to get ready for the training program.

In order for you to be well prepared, we offer the following suggestions concerning resources, materials, equipment, descriptions of training sites, or session sites, which will assist in managing staff time and handling administrative aspects of marine artisanal fisheries programs.

1. Stock the Reference Library

Several books and sets of reference materials are needed as library stock. Select materials

which will aid trainees in technical skills development, special project assignments and fish technology. Further, incorporate a few manuals and research papers that you think will be of general interest. Putting together the library is a difficult task. You will find that you have few friends and fewer resources when it comes to borrowing books We give one of the trainees a special project for setting up the library. They make up a 3" x 5" card for each item with title and author:

SAMPLE CARD

Diesel Mechanics

Erich J. Schulz

McGraw Hill Book Company

Name

- 1.**
- 2.**
- 3.**
- 4.**

The appropriate card is attached with paper clip to each piece of reference material. As items are checked out, the trainee keeps the card to know who has each item throughout training. Also, they will have responsibility for seeing that all materials are returned at the end of training.

During the pilot program we were very fortunate to have a technical trainer who brought many of his own materials to share. We were also able to get materials from the ICE sector of Peace Corps. We have included here our list of reference materials used during the pilot program. This list is not exhaustive by any means; there were many materials we wished we had but were unable to locate in Puerto Rico.

Anderson, E.P. and Palmquist, R.E. Refrigeration: Home and Commercial. Theodore Audel & Co. Indianapolis, Indiana. 1977.

Aypa, Simeon N. A Study on the Viability of Salt Making in Polyethylene Plastic Material for Small Scale Industry Bureau of Fisheries and Aquatic Resources Manila, Philippines.

Bagnis, R. Fish Poisoning in the South Pacific. South Pacific Commission. Noumea, New Caledonia.

Baines, Graham K. Mangrove and Estuarine Area Development in Fiji. Government of Fiji. Suva, Fiji.

Bardach, J.E. & Magnuson, J.J. Fish Behavior and its Use in the Capture and Culture of Fishes. 1977. ICLARM. Metro Manila, Philippines.

Barron, L.A. Fishery Training in Papua New Guinea. XXII Regional Technical Meeting on Fisheries. Noumea, New Caledonia.

Ben-Yami, M. Community Fishery Centers and the Transfer of technology to Small-Scale Fisheries. 1980. FAO. Rome, Italy.

Blandford, P.W. Netmaking. Brown and Son. Ferguson, Glasgow. 1977.

Bosworth, Velma. Photographing Tidepools. Sea Grant, Oregon State University. Corvallis, Oregon. 97331.

Boyd, N.S. Freezing and Cold Storage of Fish. Massey University, New Zealand.

Bowditch, Nathaniel. American Practical Navigator. U.S. Naval Hydrographic Office. 1966.

Brothers, Gerald. Inshore Fishing Gear and Technology. Industrial Development Branch,

Fisheries and Marine Service. St. Johns, New Foundland, Canada. 1975.

Cansdale, George S. Report on Second Regional Consultancy Low-Cost Water Filtration. UNDP/South China Seas Programme. Manila, Philippines.

Chakroff, M.S. Marine Fisheries Case Studies. U.S. Peace Corps, I.C.E. 1981.

Chapman, Charles F. Piloting Seamanship and Small Boat Handling. Motor Boating and Sailing. 1972.

Clark, Althline M. Dangerous Marine Organisms of Hawaii. Sea Grant. University of Hawaii. Honolulu, HI 96822.

Coker, R.E. This Great and Wide Sea. Harper Touchbooks. Harper & Row. New York. 1947.

Crook, Michael, ed. A Chinese Biogas Manual. Intermediate Technology Publications, Ltd. London.

Darrow, Ken, Keller, Kent and Pam Rick. Appropriate Technology Source-book, Volume II. Volunteers in Asia Publication. Stanford, CA 94305.

Darrow, Ken and Pam Rick. Appropriate Technology Sourcebook. Volunteers in Asia. Stanford, CA. 1976.

Davidson, William D. Life Begins at 40°F: How to use a Seafood-Handlers Thermometer. Sea Grant, Oregon State University, Corvallis, Oregon 93771.

de Jesus, Arseno S. Lecture in Fish Capture, Unpublished papers. Fishermens Training Center. Cavite, Philippines.

Dempsey, Paul. How to Repair Small Gasoline Engines. Tab Books. Blue Ridge Summit, PA.

1972.

Dixon, Ruth. Rural Women at Work. John Hopkins University Press. Baltimore, Md. 1976.

Drew, Stephen. A Simple Line and Net Hauler for Small and Mid-sized

Eastman, Peter F. Advanced First Aid Afloat. Cornell Maritime Press. Cambridge, Maryland 21513.

Erickson, Ralph D. Discover the Underwater World. U.S. Divers Co. Santa Ana, CA 92702.

Fisher, R.B. and Marshall, Charles A. Hydraulic Fishing Machinery Systems for Outboard Motor-Powered Boats. Sea Grant, Oregon State University. Corvallis, Oregon 97331.

Fyson, J.F. Fishing Vessel Design Proposals for Small Scale Fisheries in the Philippines. UNDP/South China Seas Programme. Manila, Phillipinest

Gentle, M.T. Population Ecology of Beche-de-mer. South Pacific Commission. Noumea, New Caledonia.

Hakim, A Detailed Structure of a Verandah Net. Fishier Division, Ministry of Ag. and Fisheries. Suva, Fiji.

Helsing, Guy Recognizing and Controlling Marine Wood Borers. Sea Grant, Oregon State University. Corvallis, Oregon 97331.

Hemingway, Ernest. The Old Man and the Sea. Charles Scribner's Sons. New York. 1952.

Hendericks, Peter L. Outboard Motor Maintenance Tips. Sea Grant, University of Hawaii. Honolulu, HI 96822.

Hermansson, Birgin. Training Fishermen at Sea. Fishing News Book. England. 1979.

Hildebrand, Kenneth S. Fish Pickling for Home Use. Pacific Northwest Publication. Oregon State University. Corvallis, Oregon 97331.

Hilderbrand, Kenneth S. Preparation of Salt Brines for the Fishing Industry. Sea Grant, Oregon State University. Corvallis, Oregon 97331.

Hillier, Albert J. How to Plan and Cut Nets. Fisheries and Marine Technology. Sea Grant, University of Rhode Island, RI 02882.

Johns, Frederick D. and Rand, Arthur G. Jr. Enzyme Methods to Assess Marine Food Quality. University of Rhode Island. Kingston, RI 02881.

Kelsen, Suend and Pizzali, A. Medina. Samahang Nayon Manual on Fish Processing and Marketing FAO/UNDP Manila Philippines. 1980..

King, Warren B. Seabirds of the Tropical Pacific Ocean. Smithsonian Institution. Washington, D.C.

Kolbe, Edward: Mate, Bruce & Jacobson, Robt. Bonding of Boats and Adjustment of Trolling Wire Voltages. Sea Grant, Oregon State University. Corvallis, Oregon 97331.

Korb, Albin W. Basic Training Manual for Marine Engineers. FAO/South China Seas Programme. Manila, Philippines.

Kotsch, William J. Weather for the Mariner. Naval Institute Press, Annapolis, Md. 1977.

Kreuzer, Rudolph L. ed. Fishery Products Fishing News Books. England. 1974.

Laevatsu, Taivo and Hayes, Murray. Fisheries Oceanography and Ecology Fishing News

Books. London, England. 1981.

Linder, Gert. Field Guide to Seashells of the World. Van Nostrand Reinhold Co. New York. 1975.

Lodge, Dennis. Fish Finding Systems Course. Sea Grant/Clatsop Community College Astoria. Oregon 97103 Unpublished report.

Lodge, Dennis. Fishing Technology Course. Sea Grant/Clatsop Community College. Astoria, Oregon 97103. Unpublished report.

Mallon, Michael H., Kolbe, Edward. Cathodic Protection for Boats in Saltwater. Sea Grant, Oregon State University. Corvallis, Oregon 97331.

Martinson, Norman. Fish Signs and Techniques. Unpublished paper. Oregon State University. Corvallis, Oregon. 1980.

Matthiessen, Peter. Far Tortuga. Bantam Books, Inc. Random House. N.Y., N.Y. 1 975.

Mead, Paul. Report on the Second Visit of the South Pacific Commission Deep Sea Fisheries Development Project to the Kingdom of Tonga South Pacific Commission. Noumea, New Caledonia.

Motte, Geoffrey A. Cutting Web Tapers. Fisheries and Marine Technology. Sea Grant, University of Rhode Island. Narragansett, RI 02882.

McCearry, Linda Sunburn and Skin Care. Sea Grant, University of Hawaii Honolulu, HI 96822.

McInnis, Walter J. and Chappelle, Howard I. Wood as a Fishing Vessel Construction Material. Department of Fisheries of Canada, Ottawa.

Noble III, Maximino. The "Immersion" of an Island. Unpublished report. 1980.

Obispo, Rolando C. Some Municipal Fishing Gear Used in the Philippines. Bureau of Fisheries and Aquatic Resources. Cebu City, Philippines. Unpublished report.

Pizzalo, A. Medina. Application of Chilled Sea Water in a Small-Scale Fishery Project-A Case Study. FAO/UNDP. Manila, Philippines. 1980.

Pollnac, Richard B. Continuity and Change in Marine Fishing Communities. AID Working Paper #10,22. International Center for Marine Resource Development. University of Rhode Island. Kingston, RI 02881.

Prescott, J. A Handbook for Lobster Fishermen of the Tropical Pacific Islands. South Pacific Commission. Noumea, New Caledonia.

Reinhart, Johanna, ed. Small Boat Design. International Center for Living and Aquatic Resources Management. Metro Manila, Philippines.

Ronquillo, Inocencio A. Detecting Fish Caught with Explosives. Bureau of Fisheries and Aquatic Resources. Manila, Philippines.

Royce, William F. Introduction to the Fishery Sciences, Academic Press New York. 1972.

Sainsburg, John C. Commercial Fishing !Methods Fishing News Books England.

Sanchez, Jesus P. and Pastoral, Prospero C. Tuna Purse Seining with the Use of the Payao (Fish Aggregating Device). Bureau of Fisheries and Aquatic Resources. Metro Manila, Philippines.

Schulz, Erich J. Diesel Mechanics. Gregg Division. McGraw-Hill Book Company. New York.

Schumacher, E.F. Small is Beautiful. Blond and Briggs London 1973.

Smith, Frederick J. Organizing and Operating a Fishery Cooperative Part 1. Sea Grant, Oregon State University. Corvallis, Oregon. 97331.

Smith, Frederick J. Organizing and Operating a Fishery Cooperative Part 2. Sea Grant, Oregon State University. Corvallis, Oregon 97331.

Smith, Frederick J. Understanding and Using Marine Economic Data Sheets Sea Grant, Oregon State University. Corvallis, Oregon 97331.

Smith, Ian R. A Research Framework for Traditional Fisheries. 1979 ICLARM. Metro Manila, Philippines.

Smith, Ian R. Puzon, M.Y., Vidal-Libuans, C.N. Philippine Municipal Fisheries: A Review of Resources Technology and Socioeconomics ICLARM. Manila, Philippines.

Souchotte, E. & Smith, D.W. Marine Auxiliary Machinery. Newnes-Butterworths. Boston. 1975.

Soucy, Robert. A Curriculum for Training Marine Mechanics Southern Maine Vocational-Technical Institute. South Portland, Maine 04106.

Southcott, R.Y. Australian Venomous and Poisonous Fishes. Mitcham South Australia 5062.

Sperling, Harry. Some Comments on Technology Transfer with Respect to Fisheries. Unpublished paper. 1980.

Steinbeck, John The Log from the Sea of Cortez Penguin Books Viking Press. N.Y., N.Y. 1941.

Stoker, Ted. Birds of the Atlantic Ocean International Marine Publishers. Camden, ME 1968.

Sumner, J.L., Boyd, N.S., Wilson, N.D. Effective Cleaning and Methods of Assessment Lincoln College, Canterbury, New Zealand.

Sweat, Don E., and Cato, James C. Squid for Supper. Sea Grant, Oregon State University. Corvallis, Oregon 97331.

Taketa, Howard A. ed. Hawaiian Prawn Recipes. University of Hawaii Sea Grant, Marine Advisory Program, 2540 Maile Way, Spalding 252B, Honolulu, HI 96822.

Takenaka, Brooks. Efficient Fish Processing and Storing. Sea Grant, University of Hawaii. Honolulu, HI 98622.

Tamesis, Pablo T. Fisheries Extension: Labors for Hercules. Unpublished paper.

Thomas, Lowell P. "Who's Killing the Corals?". Sport Diver Magazine. 1981.

Thomson, David B. Intermediate Technology and Alternative Energy Systems for Small-Scale Fisheries. FAO/South China Seas. Programme. Manila, Philippines.

Thomson, David B. Lecture Notes on Fishing Methods, Equipment and Deck Layout of Fishing Vessels. UNDP/South China Seas · Programme. Manila, Philippines.

Thomson, David B. Marine Fisheries Extension FAO/South China Seas Programme. Manila, Philippines.

Urrali, Augustin F. Guide to the Classification of Fishing Gear in the Philippines. Fish and Wildlife Service. U.S. Department of the Interior. 1950.

Von Brandt, Andres. Fish Catching Methods of the World. Fishing News Book. England. 1982.

West, Morris. The Navigator. Fontana Books. William Collins Sons & Co. Ltd. Glasgow. 1976.

Appropriate Technology for Alternative Energy Sources in Fisheries Asian Development Bank - ICLARM. Metro Manila, Philippines.

Beche-de-mer For Profit. Fisheries Division MAF..Suva, Fiji.

Beche-de-mer of the South Pacific South Pacific Commission Noumea, New Caledonia.

Bibliography for Fishermens Training. Fisheries Technical Paper No. 184. FAO. Rome. 1981.

The Biology of Reef-Building Corals with Notes on the Genera Commonly Found on the Reefs of Fiji. Marine Fisheries Department. University of the South Pacific. Suva, Fiji. Unpublished paper.

The Care and Handling of Lobsters Rhode Island Seafood Council. Narragansett, RI 02882.

Cituatera Poisoning. Fisheries Division. MAF. Suva, Fiji.

Commercial Trolling for Spanish Mackerel. Australia Fisheries. 1970.

Currents. Oregon State University Sea Grant, Corvallis, Oregon.

Detroit Diesel Engines. Detroit Diesel Allison General Motors Corporation. Detroit, Michigan 48228.

Fire. Fisheries Department. University of the South Pacific. Suva, Fiji.

First Aid for Fishermen. OSU Sea Grant Program. Corvallis, Oregon. 1971.

The Fish Boat. H.L. Peace Publications. Covington, Louisiana.

Fish Handling and Preservation at Sea. University of Rhode Island Marine Advisory Service. Narragansett, RI. 1981.

Fish Processing/Sun Curing. Fisheries Division. MAF. Suva, Fiji.

Fish Spoilage. Fisheries Division. MAF. Suva, Fiji.

Fisheries Newsletter. The South Pacific Commission. Noumea, New Caledonia

Fisheries Rural Training Programme for Local Fishermen. Fisheries Division. MAF. Suva, Fiji. 1980.

Fishing in Japan. Yamaha Motor Co. Japan. 1978.

Fishermans Manual. World Fishing. London. 1976

Fishing Gazette. Fishing Gazette Publishing Corp. New York.

Fishing News International. Arthur J. Heighway Publications, Ltd. London, England.

Fishing Systems. Fisheries Division. Ministry of Agriculture and Fisheries. Suva, Fiji. Unpublished paper.

General Processing Method of "Loaloa". Fisheries Division. Ministry of Agriculture and Fisheries. Suva, Fiji.

Guide to the Classification of Fishing Gear in the Philippines. Research Report 17. Fish and Wildlife Service. Department of Interior. USGPO. 1950.

Handbook of Homemade Power. Mother Earth News. Bantam Books. New York. 1974.

Handling Ships in Heavy Weather. Fisheries Department. University of the South Pacific. Suva, Fiji.

Home Curing Fish. Kanudi Fisheries Station. Department of Primary Industry. Konedobu, Papua New Guinea.

How to Get the Most Out of Your Fishing Line Berkley and Company Spirit Lake, Iowa 51360.

ICLARM Newsletter. International Center for Living Aquatic Resources Management. Metro Manila, Philippines.

Knots, Bends, and Hitches. Derrick Technical Institute. Samabla, Fiji.

Liklik Buk. The Melanesian Council of Churches. Lee, Papua New Guinea. 1978.

Makai. University of Hawaii Sea Grant. Honolulu, Hawaii.

Manual on Farming of Eucheunea Spinosum. GENU Products. Cebu City, Philippines. 1979,

Marine Fisheries Review. NDAA-NMFS. USGPO.

Navigation. Time-Life Books. Alexandria, VA.

Net Mending and Patching. Oregon State University Sea Grant Program. Corvallis, Oregon. 1978

Notes on Tropical Photography. Eastman Kodak Company. Rochester, N.Y. 14650.

Pasin Bilong Wakim Pis Igo Long Maket. National Fisheries College. Kovieng. New Ireland, Papua New Guinea.

Processing of Beche-de-mer. Fisheries Division. MAF. Suva, Fiji.

Purse Siene Fishing in the Philippines. Deep Sea Fisheries Division. BFAR Metro Manila, Philippines. Unpublished paper.

Ring Net. Deep Sea Fisheries Division BFAR. Metro Manila, Philippines. 1378. Unpublished paper.

Salt: A Major Growing Crop in Pangasinan. Countryside Banking. Manila, Philippines. 1980.

Seafood Business Report. Journal Publications. Camden, ME.

Seafood Leader, Waterfront Press Co. Seattle, Washington.

Sea Grant Today. Virginia Polytechnic Institute and State University. Blackburg, VA.

Small Scale Fisheries in Central America: Acquiring Information for Decision Making. International Center for Marine Resource Development University of Rhode Island. 1981.

Spear Fishing Fisheries Division, Ministry of Agriculture and Fisheries. Suva, Fiji. Unpublished paper.

State of Municipal Fishery Technology in the Philippines. Unpublished report.

Stock Assessment for Tropical Small-Scale Fisheries. U.S. Agency for International Development and University of Rhode Island. Kingston, RI.

Swimming and Water Safety Courses. American Red Cross. 1976.

Teaching Nutrition in Developing Countries or the Joys of Eating Dark Green Leaves. Shack, Kathryn W. ed. Meals for Millions Foundation Santa Barbara, CA. 1976.

Trap Net. Deep Sea Fisheries Division BFAR. Metro Manila, Philippines. 1978. Unpublished paper.

Tuna Fishing. Fisheries Division. MAF. Suva, Fiji.

Wooden Boat Maintenance: Decay and its Prevention. Oregon State University Sea Grant Program. Corvallis, Oregon. 1975.

Wood Destroyers in the Marine Environment. Robert Graham, Guy Helsing and John Lew. 1975. 75 Slides, 18 minutes. Rental: \$15.00. Purchase: \$95.00 (716.1 S-T) Describes the organisms involved in marine wood deterioration, the nature of their attack on wood, and the conditions that favor their development. Outlines preventive measures.

Wooden Boat Inspection and Maintenance. Guy Helsing, Richard Wagner and Robt. Graham. 110 Slides, 29 minutes. Rental: \$15.00, Purchase: \$105.00. (716.4 S-T). Describes common organisms and processes causing decay in wooden boats. Shows how to prevent decay, how to inspect boats for its presence, and how to make durable repairs. Focuses on the West Coast of the U.S., but the principles presented apply everywhere.

Both of the above are available from:

Sea Grant Communications AdS A418 Oregon State University Corvallis, Oregon, 97331, U.S.A.

Fish Aggregating Devices - FAD's. Mark Grandioni, RPCV Philippines 36 Slides, 12 minutes.

Provides details of bamboo and steel FAD's. Fishing operations include both small-scale fishermen in out-rigger craft and industrial style purse seiners. Available from:

Fisheries Programmes, Office of Program Development Peace Corps Washington, D.C. 20526, U.S.A.

2. Order Books

There was one book we felt it was imperative for trainees to have during their Peace Corps service, as well as for use during training. This book, The Fisherman's Business Guide, by Frederick Smith, needs to be ordered from:

**Department of Agricultural and Resource
Economics**

Oregon State University

Corvallis, Oregon 97331, U.S.A.

Telephone: (503) 754-0123

Approximate cost \$10.00 per book, one book per trainee.

The following is a list of books, catalogues and publication listings we suggest you order in advance and have on hand during the training program for staff use.

Althouse, Andrewd, Turquist and Bracciano. Modern Refrigeration and Air Conditioning. GoodheartWillcox Company, Inc. South Holland, Illinois. 1979.

Emmeshing Nets, Gill Nets and Entangling Nets, Andres Von Brandt and J.M. Hamley. Fishing News Books Ltd. 1 Long Garden Walk, Farnham, Surrey, England. (0252)726-868. Cost approximately \$20.00.

FAO-Catalog of Small Scale Fishing Gear. edited by C. Nedelec. Fishing News Books, Ltd, 1

Long Garden Walk, Farnham, Surrey, England. Also available from International Marine Publishing Co. 21 Elm Street, Camden, Maine, 04843. Cost approximately \$26.00.

Boat Maintenance. Bob Whittier. International Marine Publishing Co. 21 Elm Street, Camden, Maine, 04843, 1-207-236-4342. Cost approximately \$12.95.

The Care and Repair of Small Marine Diesels. Chris Thompson International Marine Publishing Co. 21 Elm Street, Camden, Maine, 04843. Cost approximately \$15.00.

Commonsense Coastal Navigation. Hewitt Schlereth. International Marine Publishing Co. 21 Elm Street, Camden, Maine 04843. Cost approximately \$19.95.

Catalogs:

Atlantic and Gulf Fishing Supply Corporation 591 S.W. 8th Street Miami, Florida 33130, U.S.A. 1-800-3276167

Nylon Net Company 7 Vance Avenue, P.O.BOX 592 Memphis, Tennessee 38101, U.S.A. 1-800-2387529 1-800-238-6680

Publication Lists:

Fishing News Books, Ltd. 1 Long Garden Walk Farnham, Surrey, England

Marine-Related Publications Sea Grant Communications Ad S A418/Oregon State University Corvallis, Oregon 97331, U.S.A.

Commercial Fisheries Publications University of Rhode Island Marine Advisory Service - Sea Grant Narragansett, R.I. 02882, U.S.A.

International Marine Publishing Company 21 Elm Street Camden, Maine, 04843, U.S.A.

3. The Training Site

Must include the following:

- 1. Be located in a small coastal fishing community.**
- 2. Have facilities to provide room and board.**
- 3. Staff housing/office space.**
- 4. Classroom facilities.**
- 5. Workshop space.**
- 6. Access to pier/dock.**
- 7. Be as close to water as possible.**

We were very fortunate to discover Puerto Real in the Cabo Rojo area of Puerto Rico. Puerto Real is a small fishing community with both a private commercial fishing operation and a fishermen's association. There was a small hotel which provided breakfast, and local restaurants which provided lunch and dinner. The staff was able to rent a house next to the training site, which included office space. The fishermen's association provided the classrooms and workshop area. They also gave us access to the fish processing room, the refrigerators, and to their large dock. The trainees' hotel, the restaurants, the staff house, and the classroom were all within a square block of one another, and all on the water front.

Another advantage we had was that we were 20 miles from Mayaguez, a large town that was handy for medical needs, supplies, and trainees' shopping.

In choosing the training site it is important to remember that the focus of the training program is on participant learning. Trainees should not have to cope with a physical environment that needs a great deal of managing during the training cycle. A certain amount of privacy, running water, electricity and dependable meals are minimal requirements.

4. Equipment

A certain amount of marine-specific equipment is needed for this program. We found that it was best to locate this equipment early and have it on hand for the duration of the training program.

Equipment List

Essential:

- **one life jacket P.F.D. (USCG Classification #1) for each trainee;**
- **boats-17'to 21' wooden w/15 to 25 H.P., O.B. motors, one for every six trainees;**
- **one small diesel engine, 15-30 H.P. and preferably Yanmar, for maintenance and repair practice;**
- **one used wooden fishing boat in need of repair, i.e., joint to be replaced, rotting wood, etc.**
- **a fishing boat 28' to 40', with either outboard or Diesel power, and if available, a fishfinder/echosounder, one fish boat per 6-10 trainees depending on size of boat;**
- **slide projector, with extra carrousel,**
- **16 mm. movie projector;**
- **one outboard motor for maintenance and repair;**
- **30" x 30" work tables, 1 for every three trainees;**
- **folding chairs, 1 for each trainee and staff;**
- **one industrial size first aid kit; and,**
- **access to photo copying machine that also furnishes copying paper.**

Optional:

- **1 small sail boat, 12' to 16'.**

5. Arrange for Live-ins

The criteria for site placements is that the trainees be placed in different fishing communities, and that they stay with commercial fishing families. Trainees take local transportation to their live-in sites.

We arranged these live-ins through a local fish extensionist working out of the CODREMAR marine laboratory at Joyuda. Host families were given an explanation of the purpose of the live-in by the extensionist. He also gave the family a letter in Spanish which verified the trainees' stay and explained how their expenses would be covered. The matter of paying families for hospitality has to be handled very delicately in a culture that values hospitality, as do the people of Puerto Rico. Nevertheless, an extra mouth to feed for three days can be a real burden on a small scale fishing family. See Session 013 for details of live-ins.

6. Transportation

The staff will need a car at its disposal throughout set-up and training. There will always be normal errands to run as well as the inevitable trainee emergencies. You will need to arrange transportation for field trips, medical days for overseas shots and eye examinations. We used the local taxi (Publico) for these trips. You will also need to arrange fishing vessels for fishing trips well in advance to be sure vessels will be available on the days you will need them (4 days). Small wooden boats with O.B. motors can be rented from local people. You will need these boats throughout training (one boat for each 6 trainees). If available, a small sail boat provides an excellent opportunity for trainees to learn basic small boat handling skills, as well as basic sailing skills.

7. Materials

The following is a listing of the minimal materials you will need during this training program. We have broken it down into a technical material list and a classroom/office material list.

Technical Material List

- **outboard engine tool kit (1 per o/b): 8" crescent wrench, spark plug wrench, pliers, small and large screwdrivers, cotter pins, shear pins.**
- **Diesel engine tool kit (1 per diesel): 8" crescent wrench, 10" crescent wrench, open end box wrench set, small and large screwdrivers, injector pry bar.**
- **netting needles (1 size per trainee): Duro Nylon 5 1/4" x 5/8", Duro Nylon 6" x 3/8", Duro Nylon 8" x 1".**
- **netting 4" mesh (twine) - (20 mesh x 20 mesh per trainee) netting 3" mesh (Myron nsono) (20 mesh x 20 mesh per trainee)**
- **net twine (same dimensions as netting)**
- **fish hooks (Mustad brand)**
- 2 boxes #9 Tuna Circle #39960ST (1 per 10 trainees)**
- 1 box #7 Mustad-Kirby #2330 (1 per 10 trainees)**
- 1 box #3/0 O'Shaughnessy #34007 (1 per 10 trainees)**
- 1 box #5/0 Superior #94151 (1 per 10 trainees)**
- 1 box #8/0 Superior #94151 (1 per 10 trainees)**
- **three-way swivels**
- 1 dozen #3/0 (per 2 trainees)**
- **trolling wire leader (stainless steel)**
- 1 #120 lb test packets (per 2 trainees)**
- 1 #160 lb test packets (per 2 trainees)**
- **nylon monofilament line**
- 1 #90 test 1 spool - 600 yds (per 4 trainees)**
- 1 #150 test 1 spool - 420 yds (per 3 trainees)**
- 1 #240 test 1 spool - 280 yds (per 2 trainees)**
- **plastic hand reels**
- 1 6" or 8" reel (per trainee)**
- **parallel jaw plier ("Sargent" type line cutters)**
- 1 6 1/2" or 4 1/2" (per trainee)**

- **vise grips**
 - 1 6" or 8" (per trainee)**
- **files**
 - 1 flat 1" x 8" (per 2 trainees)**
 - 1 Bastard 3/8" x 6" (per 2 trainees)**
- **hard bristle scrub brushes**
 - 1 8" scrub brush (per 3 trainees)**
- **plastic/galvanized tin buckets**
 - 1 bucket 2 1/2 gal (per 4 trainees).**
- **cotton mop**
- **brooms**
- **dust pans**
- **fillet knives - Dexter-Russell Sani-safe**
 - 1 7" x 5/8" stiff-silver horde spoon/knife (per 2 trainees)**
 - 1 7" x 5/8" fillet (per 2 trainees)**
- **sharpening stone/sharpening steel**
 - 1 stone/steel (per 10 trainees)**
- **wood for construction**
 - 2" x 2" (treated)**
 - 1" x 4" (treated)**
 - 2" x 4" (treated)**
 - 4 x 8 marine plywood (treated)**
- **wood working tools**
 - 1 hammer (per 5 trainees)**
 - 1 saw (rip) (per 5 trainees)**
 - 1 key hole saw (per 5 trainees)**
 - 1 hack saw (per 5 trainees)**
 - 1 tri-square (per 5 trainees)**
 - 1 level (small) (per 5 trainees)**

- 1 screwdriver set (wood) (per 5 trainees)**
- 1 chisel set (wood) (per 5 trainees)**
- 1 cold chisel (steel)(per 5 trainees)**
- 1 nail punch (per 5 trainees)**
- 1 carpenter ruler (per 5 trainees)**
- 1 pencil (per trainee)**
- 1 brace drill (per 5 trainees)**
- 1 wooden drill bits (per 5 trainees)**
- 1 wood rasp (per 5 trainees)**
- 1 paint scraper (per 3 trainees)**
- 1 pry bar (per 5 trainees)**
- 4 wood clamps (per 5 trainees)**
- 1 carpenter wood glue (per 5 trainees)**
- 1 spoke shave (per 5 trainees)**
- 1 cheap paint brush (per 2 trainees)**
- sand paper: 20 sheets ea. #60, #80, #120 (per 10 trainees)**
 - wood fastenings
 - bronze wood screws
 - silicon-bronze nails (ringed)
 - galvanized finish nails
 - galvanized framing nails
 - fiberglass resin/hardener
 - 1 gallon (per 10 trainees)**
 - fiberglass fabric matting/2-3" tape
 - marine paint - enamel
 - 1 gallon (per 10 trainees)**
 - visquine plastic.006 mil
 - 200 square feet (per 10 trainees)**
 - metal/nylon mosquito screening

- 2 square yards (per 10 trainees)**
- case outboard motor oil 1 case (per 10 trainees)**
- 3/8" polypropylene/polyethylene line (yellow)**
- #18 pounds or 600 feet, (per 10 trainees)**
- splicing fids**
- 1 plastic/wooden 8-10" fid (per 2 trainees)**
- thermometer (weather-mercury bulb-type)**
- 2 hand held (as above)**
- wind gauge**
- 1 simple hand held type**
- navigation charts**
- 1 local and 1 regional chart (per 4 trainees)**
- brass coupling fittings - male-female**
- 2 1/2" x 5/8" (per 10 trainees)**
- barometer (low cost)**
- cooking utensils**
- 1 12 qt. casserole (per 10 trainees)**
- 1 12" skillet " " "**
- 1 6 qt. sauce pan " " "**
- 1 3 piece plastic mixing bowls (per 10 trainees)**
- 1 mixing spoons set (per 10 trainees)**
- spices**
- 1 package salt (per 10 trainees)**
- 1 package saffron " " "**
- 1 package pepper (white) (per 10 trainees)**
- 1 package tarragon " " "**
- 1 package allspice " " "**
- 1 package bay leaf " " "**
- 1 package parsley " " "**

- 1 package fennel " " "**
- 1 package celery " " "**
- 1 package curry " " "**
- 1 package cloves " " "**
- 1 package paprika " " "**
- 1 package garlic " " "**
- 1 package ginger " " "**
- 1 package ginseng " " "**
- charcoal briquettes (100 lbs)**
- 1 charcoal grill - Hibachi style (per 10 trainees)**
- 1 package of dried seaweed**
- materials to be scrounged by the trainees:**
 - used tires (as many as possible)**
 - used spark plugs (as many as possible)**
 - beer cans**
 - wire**
 - it-bar 1/2"/1/4" x 10'**
 - 4-5 gal steel drums**
 - corroded propellers, metal**
- fish: 6 to 7 fish per 10 trainees from one to 10 days old (see Sessions 31-32).**
- 1 star map**
- 1 hand held compass**

Classroom and Office Materials

The following is a listing of minimal materials you will need for the classroom and staff office during this training program:

- newsprint pads (4 per week)**

- **three newsprint easels**
- **inch wide masking tape (8 rolls)**
- **magic markers (various colors)**
- **black ink, medium point pens (4 per trainee)**
- **3 inch loose leaf binders (1 per trainee)**
- **lined paper (200 sheets per trainee)**
- **pocket notebooks (2 per trainee)**
- **one hole puncher (3 hole-desk top)**
- **two staplers with staples**
- **two scissors**
- **white out (6 bottles)**
- **paper clips (2 boxes)**
- **rulers (1 per trainee)**
- **pencils (1 per trainee)**
- **maps of each country**
- **vitamins (high potency)**
- **industrial size first aid kit**
- **file folders**
- **scotch tape (3)**
- **Elmer's glue (1)**
- **plain bond paper**
- **one dictionary**
- **one print out calculator**
- **one receipt book**
- **one accounts book**
- **'post it' note pads**

8. Field Trips

The following is a list of places we were able to take trainees to reinforce the [earnings in some of the sessions.

- 1. Marine OB and Diesel repair shop.**
- 2. Salt making industry.**
- 3. Swimming pool for swimming safety check and P.F.D. check.**
- 4. Aquaculture station.**
- 5. Boat-building yard.**
- 6. Fish processing plant/cold storage.**
- 7. Refrigeration plant/repair facility.**

Many of these sites were within walking distance; others we traveled to. We encourage you to look around your site for similar resources. We found without exception that people were very receptive to the trainees visits and more than willing to answer questions.

9. Resource People

We decided to list the people we used either formally or informally during the training period. Some of these people came with the training site and were naturally part of the program. Others the training staff sought out. Some came later in the program as word got around about who we were and what we were doing. In any event they all added to the richness of the program.

- 1. Small-scale fishermen**
- 2. Net menders**
- 3. Fish processors**
- 4. Diesel and O.B. mechanics**
- 5. Fish handlers**
- 6. O.B. and Diesel troubleshooters**
- 7. People knowing about boat repair and construction**

- 8. Fish statistician and identification expert**
- 9. Person knowing about electronic equipment used on some small boats**
- 10. Fisheries extensionist**
- 11. Proposal writer/funding resources**
- 12. Local person who took care of introducing us to other local people**

In most of the above mentioned, contact was done on an informal basis. We found that local people were not comfortable standing up in front of a group, but did very well with 2 or 3 trainees informally. We allowed local people to sit in on any session we were giving. We had 2 or 3 regulars and for some of the outdoor sessions, we had as many as 12 on-lookers. People were very careful never to interrupt and be obtrusive in any way.

10. Certificates of Completion

Certificates need to be ordered for trainees before training starts. See Session 108 for details and rationale.

Final words about "getting ready": you will need at least two weeks prior to trainee arrival for setting up the program and for staff training. Therefore, any of the preceding steps that can be done prior to the two week lead time helps to reduce the stress generated when setting up such a program.

Conducting The Training Program

Timing

This training program comes as the initial introduction to Peace Corps service, as well as a technical training, for most of the trainees.

The design, therefore, assumes that trainees have had no actual Peace Corps field

experience in smallscale marine fisheries, but that they bring allied marine fisheries experience to training.

Location

As stated in the previous section, the setting for training is important. A training center located on the waterfront is imperative, since most of the activities are water related: Being right there saves the time of moving trainees back and forth. Of equal importance is locating the training in a small fishing community; it gives the trainee insight into the interdependence of the fisherman and the community. The cycle of life in a small fishing village is very apparent in relationship to the training activities. Trainees can test their newly acquired skills immediately, and have their experiences validated in the community. In such a location, the trainees entrance skills into developing communities are identified, practiced and instilled.

Available time is limited during the training. In selecting a site, consider as critical the "time lost factor" in taking care of "creature comforts," such as getting food, bathing and sleeping. The atmosphere of the training site directly effects participants attitudes. If they have to spend time coping with the facilities, they are less likely to spend time productively during training.

Group Size

There should not be less than 10 people in the training program. Countries recruiting less than ten people for marine fisheries programs should combine their training with other countries with similar geographic, climatic and related marine conditions. The program should not exceed 25 people. If the group size is too large, the facilitators do not have enough time during sessions to offer individual assistance, especially for the sessions identifying communications skills, technical skills and "hands on" activities.

Trainers/Facilitators

This program requires one well-rounded, experienced small_scale marine fisheries technician, one experienced process trainer - who also acts as program director, and one administrative/technical trainer. If more than one country is involved, returned Volunteers from the countries who worked in small_scale marine fisheries could be added to the staff, particularly during the orientation week of this program.

During the small group activities, groups will need the assistance of a facilitator, particularly if the group is having difficulty. Once an activity is explained and the exercise begins, the trainer(s) "float" from group to group to check that the activity is moving smoothly. During these times, trainers also collect assessment data of trainees' performance. One person cannot cover all groups effectively. It is essential to have the support of another trainer/facilitator to share the load and to consult with in handling problem situations.

The trainers are the key to the success of the training program. They create the atmosphere, set the tone, role model, and help participants achieve maximum benefit from the overall training experience.

Trainers make clear that each person gets out of this program what they put into it, and that as adults they are responsible for their own learning.

Sessions

As a part of the "tone," it is important to give a clear and concise overview of the training program what we're doing, where we're going and why. At the beginning of each session it is important to state the goals of the session (posted on flip chart paper), and, at the end, to review those goals to see if they were met. The directions for each exercise should also be written to prevent confusion by the trainees. In each session we have included the

goals, directions and, where necessary, special trainer's notes to help sessions flow smoothly. The elements of each session are:

- **the experience**
 - **processing the experience**
- generalization**
application
summarizing
linkage

Each session also highlights at least one skill area, and are intended to build a variety of skills over the training period.

Some of the sessions, particularly those where special projects are presented, also include individual problem-solving rudiments.

Materials

In the previous section on "Getting Ready", we have included a long list of equipment and material needs covering the 8 week training program. At the beginning of each session there is a materials/equipment list that you will need for each session. Since there is a great deal of managing of equipment, i.e., the small fishing boats, many materials and tools, we suggest that one trainer be in charge of all materials and equipment, to be sure that they are available when needed.

The scheduling of equipment must be done by one person to prevent confusion and to permit equal practice time by all trainees.

Sharing

Many of the activities involve sharing with a partner or small group. The reason for this is that trainees can get a different perspective about an idea or thought when they verbalize it or hear it repeated back from other people. The purpose of sharing is to add dimensions, to try to help people "stretch," and to get help and suggestions from one another.

It is up to the trainers to create an atmosphere of trust and non-judgment that will encourage people to feel free to express themselves. Early in the training process, the trainers encourage people to share with each other. Part of this sharing is the use of feedback as a tool in skills expansion and building. Trainees have a session on use of feedback as a tool during the orientation phase of this program. They are encouraged to use feedback with one another throughout the training process.

Weekly Interviews

Trainees are interviewed once a week during training. This gives trainers individual time with trainees to go over the past week's [earnings; and for trainers and trainees to explore together the individual's areas of growth and development of expertise needed by Peace Corps Volunteers involved in marine fisheries projects. Trainers can also use this time with trainees to measure progress of training, and to obtain information about the program that may require intervention or adjustments. Trainers also give trainees feedback on their progress over the last week, based on the assessment criteria (see orientation session 0-1)

Termination of a Trainee From Program

In the event that a trainee must be terminated, either by their own choice or by a decision of the entire staff that they are not suitable for Peace Corps service, it is necessary to fill out PC 1485 (2/82) which can be obtained from the Office of Special Services, Peace Corps/Washington. A well-documented report when submitted to Special Services:

- is a clear, concise, factual account of the events leading to the action taken, whether it be a resignation or a separation;
- contains a chronology of events that includes all pertinent information, e.g., dates of meetings/interviews during which the trainee's behavior or performance relevant to this action was discussed, participants' names, topics discussed, trainee's response or reaction, whether a course of action was initiated and the outcome;
- reflects the early trainee's input;
- is objective in tone;
- responds to all questions asked or indicates why the information is not provided;
- contains a recommendation for further service which is consistent with the records of service detailed in the Report; and,
- has all the necessary signatures.

Listed below are suggestions that if followed will assist you in completing the Report and providing OSS with the information required:

- Plan ahead. Make notes of meetings/interviews with trainees, especially problem individuals. Use these notes to develop a plan of action to address any offending behavior. Should the need arise, incorporate these notes into the Report.
- State the facts. Broad generalizations such as "inappropriate social behavior" or "not Peace Corps material" must be avoided.
- Write in an outline, bulleted fashion rather than in narrative paragraph form. This style lends itself to specifically stating the facts in the case rather than generally describing the case.

Reports on Trainees

Peace Corps Country staff are anxious to know about the trainees they are receiving. For each trainee, the Director of Training should write a report to Peace Corps Country

Directors at the conclusion of training using the following outline:

- 1. Staff's overall impression of the trainee.**
- 2. Areas of strength exhibited during training, i.e., skills, attributes, etc.**
- 3. Areas that need strengthening, as exhibited by..... (here particular need is described behaviorly).**
- 4. Other concerns staff may have.**

In writing these reports it is to be remembered that behavioral data is the best to report. Suppositions, hunches, and assumptions are not helpful data for in-country staff to receive about the trainee. and they're certainly not fair to the trainee.

Staff Meetings

It is important for trainers, and any other staff, to meet daily. We used the following agenda for our daily staff meetings:

- 1. Review of day**
- 2. Ready for tomorrow materials**
- 3. Anyone we are concerned about**
- 4. Feedback to each other**
- 5. Miscellaneous**

We actually had two daily staff meetings - one mid-day for the assessment team to share and record data, and the other after the last session, where we dealt with the content and process of the day, and with our readiness for the following day. We also took care of any administrative matters at this meeting.

The staff time schedule on training days was as follows:

A.M.

7:30 Technical Training session

11:30 Staff Assessment Data Meeting

P.M.

12:30 Staff session preparation time

4:00 Training session

7:30 Training session

9:30 Staff Meeting

The day before individual interviews, staff assessment data meetings tend to run longer, as staff decides on feedback for each trainee. Staff must have consensus on feedback they provide to each trainee.

Presenting the Sessions

Each session has one or more exercises directed toward meeting the goals of the session. The information provided in each of the sessions includes:

1. Session Title/Exercise Title

2. Total Time required to complete session/exercise (all times are approximate and can vary depending on number of trainees involved).

3. Overview statement describing purpose of session/exercise

4. Procedure and activities - sequenced and time steps which describe what trainer and participants are required to do at a particular point in the program

5. Material/Equipment required

6. Trainer Notes - special instructions relevant to a particular session or exercise.

Review/Study the Training Program Guidelines

Even though each session is described in detail, it will be necessary for you and any co-staff to review carefully the entire design to assure that there is an understanding of the overall sequence of activities, and of specific trainer activities / responsibilities for each session. In reviewing the design for each session you should do the following:

- 1. Review the trainer and participant materials.**
- 2. Review the purpose/goals of each session and determine the relationship of the session to the previous and subsequent sessions, and the total course.**
- 3. Prepare session/exercise goals/objectives on flip chart. Note: Write these in your own words rather than copying them verbatim from the guidelines.**
- 4. Be sure all the materials are prepared, equipment is working, and that the space needed is properly set up for training:**
 - Prepare flip charts before the sessions (if an easel is not available, paper may be tacked or taped to the wall);**
 - Prepare any lecture notes required (keep these to a minimum):**
 - Gather copies of all handouts and worksheets.**
- 5. Review the sequence of activities, the points to be discussed, and materials several times before the session to become thoroughly familiar with the session and its content.**
- 6. Assign shared responsibilities of co-trainers.**
- 7. During the presentations, keep in mind the structure of the session, i.e., introduction, major points, summary.**

If you are not confident of your own knowledge as to the content of one of the sessions, you may want to look for an outside resource to cover that session.

From time to time you will want to save newsprint from one session to another. Some newsprint you will want to keep posted for the entire training period.

Schedules

We have included the schedules for each week. The basic training day schedule for trainees is as follows:

6:45 Breakfast

7:30 Training session

11:30 Lunch

12:00 Preparation of special projects; practice of net throwing; small boat handling; and fishing.

4:00 Training session

6:00 Dinner

7:30 Training Session

There are exceptions to the above. However, the pace is intense; trainees learn how to pace themselves and handle stress while being productive in their work.

Needless to say, with a trainee schedule like this one, the staff also has to pace themselves. They need to share their work load with one another to prevent "burn out" and to insure that all sessions are well prepared and presented energetically.

Phraseology

- 1. Small-Scale Fisherman - denoted in the manual as being inclusive of both men and women.**
- 2. Small-Scale Fisheries - includes subsistence-level fishermen.**

Resource Book to be used in conjunction with this manual

As we conducted the pilot program, we had access to several research papers, articles, diagrams and charts that we found useful and informative. We have compiled these materials in a separate book, which is available in limited quantities. Those articles,

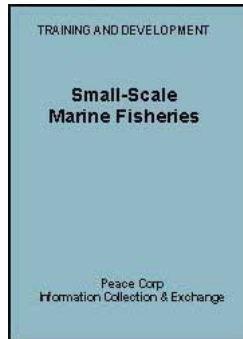
diagrams and charts that are an integral part of a given session are included in this manual immediately following the session in which it is used.

Closing Words

In the preparation of this manual we have attempted to be as clear and thorough as humanly possible. We took into consideration that each trainer brings to the program their own unique style and experience. Hopefully, we have written each session to accommodate both.



[Home](#) > [ar](#) [cn](#) [de](#) [en](#) [es](#) [fr](#) [id](#) [it](#) [ph](#) [po](#) [ru](#) [sw](#)



Small-Scale Marine Fisheries - A Training Manual (Peace Corps, 1983, 631 p.)

Week 1: Orientation

 **(introduction...)**

 **Session 1: Orientation: welcome to training**

 **Session 2: Country overview**

 **Session 3: Volunteer's aspirations re: Peace Corps Service and information filtering**

 **Session 4: Feedback and journal writing**

Session 5: Cross-cultural workbook (part I)

 **(introduction...)**

Approaching living in a new culture: A workbook for cross-cultural transition

 ***(introduction...)***
Acknowledgements

 **Contents**

 **Purposes and uses of workbook**

 **Section 1: Historical encounters**

 **Section 2: Learnings from childhood**

 **Section 3. Past experience in one culture-personal needs and the task of satisfying old needs in new ways**

 **Section 4: Leaving our own culture effectively**

 **Section 5: Responding to a new culture**

 **Section 6: Identifying to your cross-cultural learning needs**

 **Session 6: Role of the volunteer in development work (rvdw): the helping relationship as a volunteer**

 **Session 7: Individual interviews**

 **Session 8 Volunteer in development and change**

 **Session 9: Nutrition**

 **Session 10: The volunteer and technical assistance**

 **Session 11: Introduction to the cultural environment/Overview of field placements**

 **Session 12: Seamanship/personal floatation devices**

Small-Scale Marine Fisheries - A Training Manual (Peace Corps, 1983, 631 p.)

Week 1: Orientation

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
AM			Session 3 7:30 AM Aspirations and Filtering Session 4 11 AM Feedback and Journal Writing	Session 6 7:30 AM Helping Skills Session 7 11 AM Individual Interviews	Session 10 7:30 AM The Volunteer and Technical Assistance	Session 9 7:30 AM Seaman's Personal Flotation Device
PM		Session 1 2 PM Orientation - Welcome to Training	Session 5 2 PM Cross-cultural Workbook	Session 8 3 PM Volunteer in Development and Change	Session 11 2 PM Introduction to the Cultural Environment/ Overview of Field Placements	
EVE		Session 2 7:30 PM Country Overview	OFF	Session 9 7:30 PM Nutrition	OFF	

Week 1, Sessions 1 Thru 12

Session 1: Orientation: welcome to training

Time: 2 PM

Goals:

- **To welcome trainees to program**
- **To review the purpose of the orientation week and to introduce orientation goals, assessment dimensions and norms**
- **To introduce staff members**
- **To outline training site logistical considerations**
- **Review Peace Corps Policies**

Overview:

In this first session trainees are welcomed, and as much as possible, put at ease in their new environment. Trainees are apprised of the orientation that will take place for the next five days. The purpose of the orientation is to introduce trainees to Peace Corps and the role of the Volunteer. The training director gives an introductory lecturette including the orientation goals and assessment dimensions. Important points about orientation goals and assessment dimensions are emphasized. Each staff member is pointed out and introduced. Any necessary information about the training site should be outlined. A schedule for the next five days should be posted and reviewed during this first session.

Peace Corps policies are reviewed, and it is explained that these policies are effective during training as well as Peace Corps service. Finally, an ice breaker is introduced to help trainees become acquainted.

Materials:

- **Flip chart paper, markers, tape**
- **Orientation schedule, Assessment dimensions and Peace Corps Handbooks**

Exercises

- 1. Directors Lecturette and Schedule**
- 2. Review of Peace Corps Policies**
- 3. Ice Breaker**

Trainers Notes:

1. In the opening lecturette, the training director sets the tone for the entire training period. The orientation period prepares the trainees for the intensive technical training as well as introduces them to Peace Corps and Volunteer service. Generally, since this is the first session and everyone will be a bit nervous and not listen too well, discussion should be at a general level.

2. The training director should have on newsprint the following:

- **any staff expectations that are to be discussed in opening lecturette**
- **any overall training considerations to be emphasized, including management of the training site**
- **assessment dimensions**
- **goals of the Orientation program**

3. The sample lecturette includes a range of issues that need to be addressed in the opening session. Training directors should use this in preparing their opening lecturette.

EXERCISE I - Training Directors Lecturette and Schedule

Total Time: 2 PM to 3 PM

Procedures:

Time Activities

30 Minutes	1. Training director gives the following lecturette:	
	I'd like to welcome all of you to for the Marine Fisheries	
	Training. I'm , the Director (add a little background, usually how you are connected with Peace Corps). I'd like the rest of the staff who will be working with you this week to introduce themselves and share with you their particular roles in this training. (After intro's, probably add some comment on variety of backgrounds and variety of	* exactly what is State Side Training
	connections to PC.) I think I can speak for the entire staff when I say that we are excited, and relieved, that you are finally here. We've been together for the last two weeks preparing for your arrival...and I imagine that after a day's travel and a morning bus	* just what's going to happen to me in the next eight weeks
	ride, you too are excited and relieved to finally be here. The last few weeks you have probably talked with	* and exactly what do "they" expect from me?

	recruiters, people at Placement in Peace Corps Washington, perhaps friends who have been in Peace Corps, and you are probably still wondering	
	I'd like to address those issues so we can all come to some common understanding and agreement of our purposes here over the next eight weeks, and particularly talk about the first week which we call your orientation to Peace Corps service week. We want you to get a feeling for what volunteer life is about and whether that life is for you.	
	So we are here for a week long series of activities, sessions, simulations for the dual purposes of assessment and training for eventual Peace Corps service, after an additional seven weeks of technical training. You have been invited to State Side Marine Fisheries Training. You are, by the fact that you are here, considered to be Peace Corps trainees. Together, you and the staff will decide whether you are to go to for additional in country training and ultimately for Peace Corps service as a volunteer. In this next week of orientation we will interview you for Peace Corps service and you will interview the Peace Corps..."Is this what I want to do for the next two years of my life."	
	What we are really talking about, of course, is two years plus the next 12 weeks of training both here and in Simultaneously we will begin training in preparation for two years as a Marine Fisheries Volunteer. The purpose of this training program is two-fold: Assessment and training.	
	Peace Corps has spent a great deal of time, effort and expenses developing this particular Marine Fisheries training program. For one thing, Peace Corps is concerned about the quality of the volunteer being sent to do development work with Third World nations - we want to be sure that we are selecting the highest quality person for volunteer service - who understands what development work is, are competent marine fisheries extensionists and confident that they will be able to do the job. Further, we want persons who are selected to understand how Peace Corps, as an agency, relates to development work. Finally, we want persons who, as individuals, will be satisfied about the quality of their PCV experience. Peace Corps also became aware that a significant number of volunteers	

	<p>were not completing their two year commitments - I really can't quote the exact percentage - but nonetheless, a significant number of volunteers were leaving early. In the Peace Corps language, that's referred to as an "E.T." - early termination. That, again, seemed to relate back to assessment and training What perhaps wasn't Peace Corps doing to select or train volunteers for the realities of living and doing development work in another culture?</p>
	<p>So in response to the issues of quality (quality of the volunteer, quality of the volunteer's service, quality of the volunteer's experience) and the rate of volunteers not completing their two year commitment to service, this intensive training program was developed to give you the best possible technical training and to assess you as a possible volunteer. I want to emphasize here that this next eight weeks is your opportunity to be sure in your own mind that you are able to make this commitment, for this service, at this time in your life. Peace Corps has identified certain basic key skills that are essential to successful or effective volunteer service anywhere - from</p>
	<p>Botswana to Barbados. Training this week, then, will focus on skill building in these areas:</p>
	<p>* Skills for cross cultural transition and adaptation. Skills to successfully and smoothly move from your own culture into another. tools for adapting to living and working in a new situation...tools to identify and deal with various aspects of a different culture.</p> <p>* We'll also work on identifying the role of the volunteer in development work and build skills to facilitate that role: We'll identify some of the</p>

		characteristics of the helping relationship, one person to another...working one person to a group, or consulting...and working one person to a system...and well tie that together by dealing with some of the key issues in development work: Paternalism, neocolonialism, racism, etc.
		* We'll provide information about _____
		(Country X), Peace Corps in _____ (X).
		You'll begin here at State Side Marine Fisheries
		Training to identify resources and tools for recognizing the need for support - and sources to seek support from. We'll look at stress, culture shock and wellness as they relate to volunteer service.
		* We'll look at Peace Corps expectations - both your "expectations" of Peace Corps service and Peace Corps' expectations of you.

		* And finally, next week we will start on intensive technical training.
	To summarize, training goals this week are:	o Cross cultural skills
		o Role of volunteer in development work
		o Building support systems
		o Health and wellness
		o Specific information on (X) and Peace Corps
		o Checking out your and Peace Corps' expectations
	Now I would like to address the assessment goals of Marine	
	Fisheries Training:	o to enable trainees to recognize their skills and to feel competent in the use of those skills;
		o to teach trainees how to transfer the technical skills they have to others;
		o to identify and improve skill areas that need strengthening;
		o for trainees to understand their role as Fisheries
		Extension Peace Corps Volunteers

		in the host country; o to help trainees identify and find resources available to them in their community sites and host country agencies;
		o the illustration of competence in fisheries extension techniques, in fish processing, fish preservation, outboard/Diesel repair and maintenance, fisheries economics and marketing, small scale fishing and fishing vessels, and vessel repair and construction;
		o the ability to analyze properly communities' social systems, which should identify problems and help communities seek solutions;
		o an understanding of the basic theories of fisheries extension work;
		o increased interpersonal, team building and communication skills; and,
		o a better understanding of global and country-specific fisheries

		<p>ISSUES Staff will evaluate your performance - your behavior</p>
	<p>-according to these dimensions every week. I stress the words "performance" - and "behavior." As objectively as possible, based on an evaluation of your performance according to the assessment dimensions, we will - as a staff - make a decision about each participants' suitability for Peace Corps service as a Marine Fisheries Volunteer. In accordance with the principles of experiential learning, we all share in the responsibility for learning. As adults we know that you will learn best by experience based on your need to know, while your experience is being validated. If this sounds strange to you, just let me say that for the next eight weeks you will be learning experientially just about everything we offer you. This is based on the adult learning theory.</p>	
	<p>You may not understand that now, but the one thing I want to make sure you understand is that "you are responsible for your own learning." As a staff we are dedicated to helping you become competent as a Marine Fisheries extensionist. We will do everything we can to help you gain the confidence you will need to be a productive volunteer, but the one thing we can't do is learn for you - this you must do for yourself. We have an expectation to begin sessions on time and to be on time. We have a lot to do, so out of respect for each other, let's all make a commitment to be on time.</p>	
15	I would like to share this week's schedule with you	

15 Minutes	1. I would like to share this week's schedule with you.	
	Let's just go over it, shall we. (Schedule should be posted on newsprint)	
	I guess you can see what I mean when I say we have a lot to do.	
	Now I need to share some of the logistical concerns about our training site.	
	(Posted on newsprint is schedule for meals, time and place, etc.)	
	Finally, on behalf of the entire staff, I'd like you to know that we recognize that you are on the verge of choosing to make a significant change in your lives and we acknowledge that that takes courage - it takes guts to go beyond the cultural life you know so well. And most importantly, we acknowledge that you are on the verge of making a serious decision the decision to make a two year commitment to the development of another country. That makes you different in some ways from your friends and colleagues... You are special and unique people, and it's both a pleasure and privilege to work with you over the next eight weeks.	
15 Minutes	2. Training Director should acknowledge that everyone has sat very patiently, and we still need to go over Peace Corps Policies. But before we do, let's take a 15 minute break.	

EXERCISE II - The Peace Corps Policies

Total Time: 3 PM to 4:15 PM

Goal:

- **To identify and discuss the Peace Corps policy issues which have an impact on volunteer service and lifestyles.**

Procedures:

Time	Activities
5 Minutes	1. Training Director introduces the session by explaining its purpose and what topics will be discussed.
65 Minutes	2. Training Director and other staff members as appropriate present policy information in a lecture format, responding to individual questions as they arise. The following questions may be used to wrap up the session:
	a. Is there anything still not clear to you about Peace Corps Policy?
	b. Now that you know the policies, how might they affect your decision to join the Peace Corps?

Materials:

- **Magic markers**
- **Flip chart paper**
- **The Peace Corps Policies handout**

Trainer's Notes:

- 1. The Peace Corps staff from Washington and in-country staff may want to add information about policies or rules specific to their program at appropriate times during the presentation.**
- 2. This session addresses the Peace Corps/Washington and in-country policies. How this session is to be handled, who is to take a lead role(s), and what is to be covered should be discussed during staff training. Staff members should clarify what policies they will be speaking on, and how they will handle controversial questions.**

EXERCISE III - Ice-Breaker

Total Time: 4:15 PM to 5 PM (approximately)

Goals:

- **To encourage group participation**
- **To allow individuals to become acquainted**
- **To begin building a sharing atmosphere**

Procedures:

Time	Activities
5 Minutes	1. Opening remarks for structured experience: One of the things we want to accomplish is to get to know one another and to be able to share our ideas and experiences. The activity we are going to do now is intended to facilitate that process of knowing one another and sharing.
5 Minutes	2. Ask participants to form small groups of three to five people. Give each group newsprint, ink markers, and masking tape. 30-45
	3. Ask each group to spend time getting acquainted, and then to draw a collaborative

	picture that will represent them and that will constitute their introduction to the larger group. No words are allowed in the picture. 20-30	
	4. Return to large group and share pictures and intro auctions. Each small group is to decide how the introduction is to take place. Each small group introduction should be limited to about 5-8 minutes. (At some point the trainer should mention that the individual drawings will be used later. When the session is over the trainer should take the drawings off the wall and save them until the last day when they will be used in the session on "Closure.")	
15 Minutes	5. Closure: Trainer then assists the group to:	- Look for commonalities and differences among the groups
		- Generalize from the introductions some interesting interest within the group
		- Relate ideas from the introductions to the training goals, the overall schedule, and the following day's work

Session 2: Country overview

Time: 7:30 PM to 10 PM

Goals:

- **To provide general information about the country**
- **To give an overview of Peace Corps programs in-country**
- **To identify and discuss expectations Peace Corps in-country may have of its volunteers**

Overview:

This session will be designed jointly during the staff training period by country related staff and SS training staff, with the former being in charge of content and the latter

formulating structure. Its design needs to be congruent insofar as possible with the experiential learning approach training is based on. This session needs to be an integral part of the training, both in terms of methodology and content.

Experience in previous trainings point out the following as important:

- 1. Any visual material is highly valued by participants -- slides, movies, etc. At this point, people are concerned about basics -- how are they going to live, where, what to eat and so on.**
- 2. Although this is the only session specifically entitled "Country Overview", there is throughout the training generally a rich interplay between country specific information and generic training activities. Participants should be encouraged to view this as a beginning to a process that will continue throughout training and during volunteer service.**

Trainer's Notes:

The following design is from the CAST model. It is highly unlikely that there will be more than one person to help with country overview. Therefore, emphasis should be placed on visual materials. It is necessary for training staff to be as informed as possible about the Host Country(s).

Country-Specific Session

The following design was used in the Nepal August/79 CAST with extremely successful results. This was due in part to the design itself, but probably more so to the preparation and cooperation of the Host Country, Desk staff and RPCVs. It is suggested as one option for approaching the country-specific session, and can be changed based on staffing patterns and State Side Training.

Procedures:

Time	Activities	
5 Minutes	1. Country Desk Officer introduces session.	
30 Minutes	2. Trainees meet in small groups and brainstorm what they know about Nepal	a) economics
	listing topics on flip charts according to:	b) politics
		c) geography
		d) culture
		e) religion
		f) miscellaneous
5 Minutes	3. Flip charts are posted in large room where all small groups review each other's flip charts.	
5 Minutes	4. Packets with country-specific information are passed out to each trainee.	
20 Minutes	5. BREAK for coffee and time to review handouts.	
	6. Desk Officer introduces two RPCVs and Host Country National. The three	a) volunteer experience
	individuals have prepared talks which cover the following aspects:	b) housing, job, health
		c) cultural surprises, village life
		d) food, past-times, culture
		e) PC/Nepal (size of staff, role of staff, PC History)

f) village entry

g) country entry and training

Session 3: Volunteer's aspirations re: Peace Corps Service and information filtering

Time: 7:30 AM to 10:30 AM

Goals:

- To identify the aspirations each participant has regarding Peace Corps and Peace Corps service.
- To discuss these aspirations in view of Peace Corps' "field reality," history, expectations of volunteers, and service ideals.
- To begin to develop skills at gathering, validating, integrating and filtering information.

Procedures:

Time	Activities
10 Minutes	1. Trainer explains to the large group the goals of the session and general procedures, sets climate and provides rationale (See Trainer's Notes #1).
10 Minutes	2. Ask each individual to write the aspirations he/she has about Peace Corps and Peace Corps service.
	These may be aspirations about professional growth or personal enrichment. Encourage people to be as thought full and reflective as possible, to relax and really search. The basis for degrees of satisfaction/ dissatisfaction is often related to aspirations people take with them overseas. This is a critical activity.
25 Minutes	3. Divide large group into groups of 5-6 individuals to share, identify, pool and record common aspirations on newsprint. Each group should select their three most important

	aspirations and put them on newsprint. If an individual feels strongly about an aspiration even if no one else shares it, it should be recorded.
15 Minutes	4. Take a break. During the break, trainers should look at lists and identify three, four or five common patterns and/or particularly rich (for discussion purposes) aspirations.
60 Minutes	5. After the break, Trainer shares some of the patterns/rich aspirations that he/she identified during the break. At that point, an open discussion should be generated which responds to or focuses on these generalized aspirations.
	The trainers may provide some yes and no answers (e.g., "No, the Peace Corps does not supply Land Rovers"). More likely, the trainers will begin to deal with the complexity of what appear to be simple issues, and ask further questions (e.g., "participant expects to make big changes in health care incountry." Trainers: What are big changes? How will you know when you are succeeding? It has been the Peace Corps' history that ...", or "In-country, some volunteers deal with the question of change by..."). This is where the country-experience of people (country staff, RPCVs CDOs) will make appropriate comments by sharing their perspective on certain issues. This is one of the ways in which country-specific information is interwoven into sessions throughout the week. The process involves an interplay between questions, providing information, asking more questions, and going on to the next issue.
10 Minutes	6. At about 9:00, Trainer gives a brief lecturette on information filtering. The following chart and lecturette can be used to structure a discussion about the information filter. "Consider for a moment the following conceptualization of how people chose to respond to a situation. For each event in which we are involved, we make an interpretation of the event. Events get interpreted through filters, and decisions to respond come through filters. Each of us has our own set of filters based on our values, life experiences, background, likes/dislikes, parents, self image, etc. (AT THIS POINT TRAINER SHOULD TAKE AN EVENT FROM HIS OR HER LIFE AND PUT IT THROUGH THE INFORMATION FILTER WITH PERSONAL EXAMPLES.) The response which emerges from the filtered information becomes the event for person B, who then interprets and responds through

	his/her filters. Thus, we could describe communication as an attempt to get truth or reality through the filters of one or more individuals. Filters have a powerful effect on our thoughts and actions. Often we are not even aware of filters which affect the decisions we make."
20 Minutes	7. Ask each person to take 10 minutes to quietly reflect on their filters and filtering processes, listing what they feel are their personal filters. Next, each person should choose one other person and share and discuss their personal filters.
20 Minutes	<p>8. Reconvene the large group and elicit the key learnings from this activity. Trainer then links this in creased awareness of filtering to the skills needed to gather, validate and integrate information. One way to improve those skills is to be aware of the following issues and make them a part of your method of operating in</p> <p>a. What am I really asking for when I ask a question? For instance, the following are examples of questions which may (whether intentionally or not) mask several different needs: Will I be placed with another volunteer? Where can my mother reach me in (country)? You may want to ask a different or more precise question in order to get at the information you really want or that meets your real need(s).</p>

	(country) culture.	
		b. Can I realistically expect to get the answer from this source or by asking this question? For example, asking a volunteer, who doesn't speak the language, about the importance of learning the language may be an ineffective strategy.
		c. How should I treat the information once it's provided? Views Not Represented Here. Most of us here have had a positive Peace Corps experience; we're not the ones who left early. What about HCN response to the Peace Corps? Truth. There's no reason the information you get about (country) should be treated as more "true" than you would treat information in a back-home setting. The Peace Corps Community. Should you treat information you receive from volunteers or staff equally? Are some volunteers better sources than others? Why? Ambiguity. Can I live with the ambiguity that seems to exist in response to this question? Own Truth. What am I going to do to follow up this information with other question, with other sources? What do I need to know in order to be satisfied? Perspective. How does the information source's perspective about life, fun, and development, match my own? The Aspirations Discussion is not meant to be a consensus-seeking activity, nor is it meant to provoke disagreement. Rather, it is a time when people can begin to reflect critically about their aspirations. As such, some of their aspirations may need to be challenged or taken to a different level of complexity. At the very least, such reflection should assist participants in their self assessment process.
		No matter in what way you as Trainer choose to explain filtering, you should stress that there are several different ways to describe it, and that they may encounter a different way of explaining it during

training. This is their introduction to Information Filtering, and it may be reintroduced during training. The PST staff is using some of the recently developed core curriculum materials.

PERSON A

AN EVENT	FILTERS
	INTERPRETATION OF EVENT
DECISION TO RESPOND	<ul style="list-style-type: none"> o Self-Image o Trust o Respect o

PERSON B

FILTERS	AN EVENT
<ul style="list-style-type: none"> o Values o Attitudes o Life Experiences o Background o Likes o Dislikes o Parents o Culture o Self-Image o Trust o Respect o 	
	DECISION TO RESPOND

COMMUNICATION

Parsons A & B

Session 4: Feedback and journal writing

Time: 11 AM to 12:30 PM

Goals:

- **To review how to give and receive feedback;**
- **To learn more about ourselves;**
- **To become more skillful in obtaining and understanding information about the effectiveness of our behavior;**
- **To become more sensitive to our reactions to others and the consequences of these reactions;**
- **Participants will understand the importance of keeping a journal.**

Materials:

- **Flip charts, marker pens, tape, note books with tabs for journal**

EXERCISE I - FEEDBACK**Total Time: 1 hour****Overview:**

The purpose of this exercise is for participants to practice giving timely, skillful feedback.

Procedures:

Time	Activities
5 Minutes	1. Trainer should acknowledge that the trainees may know about feedback, but here in training it is a very useful tool,
5 Minutes	2. Ask individuals to jot down as many feedback rules as they can remember off the top of their heads.
15	3. Trainer now produces newsprint with the following rules:

FEEDBACK RULES

- 1. It is honest and frank rather than diplomatic or subtle. It is true reporting of your real feelings and reactions to the behavior of another person. This implies that you are aware of your reactions and are willing to run the risk of possible rejection by sharing them with the other person.**
- 2. It is specific rather than general. To be told that one is dominating will probably be as useful as to be told that "Just now you were not listening to what the others said, but I felt I had to agree with your arguments or face attack from you."**
- 3. It is focused on behavior rather than on the person. It is important that we refer to what a person does rather than to what we think or imagine he is. Thus we might say that a person "talked more than anyone else in this meeting" rather than that he is a "loudmouth." The former allows for the possibility of change; the latter implies a fixed personality trait.**
- 4. It takes into account the needs of the receiver of feedback. Feedback can be destructive when it serves only our own needs and fails to consider the needs of the person on the receiving end. It should be given to help, not hurt. We too often give feedback because it makes us feel better or gives us a Psychological advantage.**
- 5. It is directed toward behavior which the receiver can do something about. Frustration is only increased when a person is reminded of some shortcomings over which he has no control or a physical characteristic which he can do nothing about.**
- 6. It is solicited, rather than imposed. Feedback is most useful when the receiver himself has formulated the kind of question which one can answer either by observing him or**

through actively seeking (soliciting) feedback.

7. It involves sharing of information rather than giving advice. By sharing information, we leave a person free to decide for himself, in accordance with his own goals, needs, etc. When we give advice we tell him what to do, and to some degree take away his freedom to decide for himself.

8. It is well-timed. In general, immediate feedback is most useful (depending of course, on the person's readiness to hear it, support available from others, etc). The reception and use of feedback involves many possible emotional reactions. Excellent feedback presented at an inappropriate time may do more harm than good.

9. It involves the amount of information that receiver can use rather than the amount we would like to give. To overload a person with feedback is to reduce the possibility that he may be able to use what he receives effectively. When we give more than can be used, we are more often than not satisfying some need of our own rather than helping the other Person.

10. It concerns what is said or done, or how, not why. The "why" takes us from the observable to the inferred and involves assumptions regarding motive or intent. Telling a person what his motivations or intentions are more often than not tends to alienate the person, and contributes to a climate of resentment, suspicion, and distrust; it does not contribute to learning or development. It is dangerous to assume that we know why a person says or does something, or what he "really" means, or what he is "really" trying to accomplish. If we are uncertain of his motives or intent, this uncertainty in itself is feedback, however, and should be revealed.

11. It is checked to insure clear communication. One way of doing this is to have the receiver try to rephrase the feedback he has received to see if it corresponds to what the sender had in mind. No matter what the intent, feedback is often threatening and thus

subject to considerable distortion or misinterpretation.

	Trainer asks how many of you remember all eleven rules?
	4. Trainer now gives the following reasons why we want to practice and become more skillful at giving and receiving feedback.
	a. By learning to give and receive feedback skillfully, we help ourselves and others become more effective as volunteers.
	b. The more we learn about ourselves in this training and about how effective our behavior is, the more we will be prepared for our two years as an effective volunteer.
	c. We will also become more sensitive to our reactions to others and the consequences of these reactions in our interpersonal relationships.
15 Minutes	5. Trainer now asks group to break into groups of five and brainstorm ways in which we can become more skillful at giving and receiving feedback and list ideas on newsprint.
5 Minutes	6. Trainer now asks groups to present their list to entire group.
	7. By way of summarizing, two trainers model giving and receiving feedback through short role plays.
	The feedback should be real; perhaps based on the aspiration exercise that they took part in. This would help set a climate of openness. It is also important to model positive feedback.

EXERCISE II - JOURNAL WRITING Total Time: 1/2 hour**Goals:**

- **To understand the importance of collecting and recording data daily in a journal as part**

of their profession

- To perceive the journal as a key to recording information and providing a tool for trainees to use once they have left the training program
- To allow their journal to assist project management and continued learning, as well as goal setting, planning and personal reflection

Overview:

The purpose of this exercise is for trainees to start keeping a journal during training. Trainees need to keep a journal so that they can organize and examine their experiences during training and learn from them.

Procedures:

Time	Activities	
	1. Trainer introduces journal writing by posting the following on newsprint:	a. Events
		b. People
		c. Feelings
		d. Striking thoughts or "insights"
		e. Experiences with ideas
		f. Experiences with things
		g. Dreams/fantasies
	2. Trainer explains journal format. Gives instructions to begin making journal entries for the week. Trainer stresses that collecting and recording data daily is part of the profession. They will need to record data that they will use later in training. Gives examples of how important	

each topic area is.

Session 5: Cross-cultural workbook (part I)

Time: 2 PM to 6 PM

Goals:

- **To identify and discuss personal and historical, positive and negative cross-cultural encounters**
- **To reflect upon, discuss, and compare how, when, and where one's attitudes toward strangers and people of difference are formed**
- **To examine characteristics of highs and lows participants have had over the past year and how they may relate in a new culture**
- **To reflect on leave-taking and identify major unfinished business**
- **To identify the problems participants expect to encounter when entering a new culture**

Procedures:

- 1. Trainer introduces to the reference group the goals of the session, sets the climate.**
- 2. Trainer presents time frames and Sections. Divide the reference groups in half and use the Workbook. Each participant should have a copy. Each exercise is self-explanatory.**

Materials:

"Approaching Living In A New Culture: A Workbook for Cross-Cultural Transition"

(Flip Chart For Climate Setting)

Preparing to Enter a New Culture

Study yourself and realize what you are taking into experience.

Look at ways of presenting:

Yourself

Your values

Your expectations of the other culture

Learn about leaving one culture and entering a new culture.

Make a plan for how you will learn about the new culture.

Examine any "unfinished business" and other elements of leave-taking.

Trainer's Notes:

1. The Cross-Cultural Workbook is to be worked by dividing the reference group into four groups. Reference group trainers can divide their time between groups. Movement between the groups should be done without disrupting group discussion and process. The role of the trainer is to observe and provide relevant country-specific information or information about the Peace Corps. The trainers are not to facilitate the discussions unless there is sufficient staff who are familiar with the Workbook and are comfortable facilitating the discussion.

2. The self-monitoring principle is implemented during the Workbook sessions. Times and Sections are to be written on flip charts. Participant responsibility for implementation needs to be stressed during the opening of the session. The time frames presented are estimates and participants are to adhere to them as closely as possible, but use "group judgement" to determine when to move on to the next Section. The trainer needs to be aware of time, but again, the participants are responsible for task and time monitoring. In

preparing the time frame flip charts, trainers may want to delete Section 1C if time is a problem.

Tentative Time	Schedule:
2:10 - 2:55	Section 1 A and B (C)
2:55 - 3:25	Section 2 A and B
3:25 - 3:55	Section 2 C
3:55 - 4:05	Break
4:05 - 4:35	Section 3 A
4:35 - 4:55	Section 3B
4:55 - 5:25	Section 4
5:25 - 5:40	Section 5
5:40 - 6:00	Section 6

3. If staff members have not read the Cross-Cultural Workbook they should take time to read it and develop a clear understanding of its content and flow. Staff members can be introduced to the Workbook in staff training, but additional time (1 to 2 hours) will be needed to read and review it.

4. At the end of this afternoon session, trainers hand out the article, Volunteers and Neo-Colonialism. Ask participants to read it and identify one issue that is relevant and significant.

Approaching living in a new culture: A workbook for cross-cultural transition

**Core Curriculum Resource Materials
Office of Programming and Training Coordination**

Revised September, 1981

Acknowledgements

This Cross-Cultural Workbook has had a long (at least for training materials) and venerable history, and many people have contributed to make it what it is today.

It was originally developed in 1971 by Jim McCray, Debra Mipos and Dick Vittitow under the auspices of the VISTA regional training center in San Francisco. I. was designed to be used in training VISTA volunteers who were working with Native Americans and Mexican Americans in the Southwest. That original edition was used in VISTA training in the Southwest for a couple of years, and it is unclear what happened with its VISTA history after that.

The Workbook made its "reappearance," albeit in a different setting, in 1978. At that time, we were looking for training designs for use in the CAST (Center for Assessment and Training) that would help prospective Volunteers begin to make the transition from one culture to another. The Cross-Cultural Workbook seemed an extremely sound training tool, and it was very close to what was needed. Thus, we adapted it to the Peace Corps setting, and inserted it into the CAST program.

Since 1978 it has been a part of all CAST's, and has been used in some stagings and pre-service training programs. It was modified in January of 1980 by John Pettit, who added a couple of elements and made changes based on feedback received about the manual over the one and a half years the Peace Corps had been using it.

We then revised the manual in September of 1981. Although we did clear up a few remaining glitches with this most recent revision, the major aim was to make the manual more congruent with the other core curriculum, training materials that were developed in the cross-cultural area over the past year. We think this goal has been accomplished,

especially since the last section now helps people take a first cut at identifying cross-cultural leaning needs and ties this process directly into the first major cross-cultural training session which is intended to occur during Week One of pre-service training.

This manual is now designed to be the first module in the cross-cultural section of the core curriculum. We hope that users find it stimulating and fun, and we wish to acknowledge Pettit, McCray, Mipos, Vittitow and the many others who have used it and given us feedback, for their respective parts in its development.

Dan Edwards James A. McCaffery September, 1981

Contents

Purposes and Uses of Workbook

Exercises:

Section 1. Historical Encounters

Section 2. Learnings from Childhood

Section 3. Past Experiences in One Culture, Personal Needs and the Task of Satisfying Old Needs in New Ways

Section 4. Leaving Our Own Culture Effectively

Section 5. Responding To A New Culture

Section 6. Identifying Your Cross-Cultural Learning Needs

Purposes and uses of workbook

This workbook represents the First part of the Peace Corps cross-cultural training program. It is intended to help people begin the task of learning to live and work in, a culture different from their own. It is designed so that groups of 3-5 people can work through it and it is suggested that there be a facilitator. The purpose of the facilitator is to have someone to watch the time, to help in drawing out the learnings during discussion,

and--as a person who has probably gone through either the Workbook or a cross-cultural experience before--to help interpret and expand upon the exercises in the Workbook.

In setting up this workbook? we have based our work on five principles which we feel must be recognized to achieve a successful experience in cross-cultural living:

- 1. Even though you may not realize it, you will discover that you already have some skills that will help you to be effective in cross-cultural settings.**
- 2. As you enter a different culture you will have to take stock of you' present skills which are related to cross-cultural living, use those which are appropriate, modify others, drop some and build new ones. Although this seems like a simple process, it is not; rather it is exceedingly complex and will require a certain struggle as you go through different cross-cultural experiences.**
- 3. Careful preparation and training can make you more effective more quickly as you enter a different culture.**
- 4. Effective cross-cultural preparation emphasizes skill building rather than learning specific pieces of information.**
- 5. You can profit by sharing your perceptions and learnings with others who are engaged in the same process, and they will also learn from your experience.**

As you probably noticed from looking at the Table of Contents, this manual is divided into six sections. Each section contains a set of exercises that are designed to help you develop your learning framework for approaching the experience of living in a new culture. As you work through these in your small group you will have an opportunity to study yourself and to recognize what you are taking into the experience. After completing Sections One through Five you should be able to answer questions such as:

- **In what ways do you think you present yourself, your values and your expectations of the other culture?**
- **How have all these personal values been built up?**
- **Based on your life experiences and personal needs, what are some of the learning needs and problems you might have in responding to another culture?**

Adjusting to a new culture is hard but you do have many past experiences and learnings which will parallel the things you are called upon to do. After reading the material on cross-cultural living in Section Five you will begin to get a sense of what some people refer to as culture shock. This information, along with your own self perceptions, will be a valuable bridge to learning to live in-the new culture. By developing learning needs in Section Six you will have the basis of a tentative plan for how you may want to approach this new experience. This will be followed up in-country during the first week of pre-service training. Thus, it is very important to bring this manual and your work with you.

If all of the above is done thoughtfully the results will make you more at ease as well as give you a personal framework within which you may learn to live in a new culture.

In terms of using the manual, much experience has indicated clearly that you should reflect individually and write your responses to the various Sections first, and then discuss them in your small group. That individual reflection time is a critical factor in the process, and it receives insufficient attention if you simply use the Sections as discussion questions.

A final note: We have tried to design this Workbook to fit the general needs of prospective Volunteers entering a new culture. We have also designed it to be integrated into pre-service training. Hopefully, it will be a useful tool to help you prepare yourself for a rewarding experience. It is not intended to be used once and forgotten. Thus, you should

take it with you and refer to it as a kind of on-going check list for what you want to accomplish.

It remains only a tool, however, and like all tools it should be tried out, examined for effectiveness, and then modified if necessary to make it more useful to you. Use it however you think is best, but don't let the tool use you. If you find a better tool or a better use for this one, let us know so we can revise and update the Workbook as needed. Help us help others prepare themselves, and maybe our venturing into new and different cultures will be better all around.

Section 1: Historical encounters

Historically, there have been many problems when people of different cultures meet each other for the first time. These encounters have often resulted in war, exchange of disease, and the domination of one culture by the other. The cost in human life and suffering has been enormous.

A person never enters a new culture solely as an individual. Inevitably, he brings with him some of the history as well as many of the values and attitudes of his own culture, as one of many "foreigners" or "outsiders" who have come in the past, and who will continue to come in the future.

A. To begin to disentangle the complex problem of how -you learn to participate in another culture, it is helpful to go back into history and think about any one example, in either myth or reality, of how people of different cultures related to one another in a negative way and then to describe the negative qualities or consequences of their encounter.

Negative Qualities of Encounter

(Share and discuss with your group.)

B. Now, think of an historical situation, reality or myth, where people of difference encountered each other with positive consequences.

Positive Qualities of Encounter

(Share and discuss with your group.)

C. Re-examine your 'lists of the positive and negative aspects of these encounters. What criteria did you use to determine if an aspect of encounter was positive or negative? (An example of a negative criterion might be the decline of native arts and crafts; a positive criterion might be alleviation of hunger or suffering, as with the introduction of a new domesticated food plant.) Write down some criteria for positive encounters and negative encounters. After you and others have finished individually, try as a group to develop five criteria for positive encounters and five criteria for negative/encounters. Take about 10 or 15 minutes to see if you can agree on these criteria.

Criteria for	Criteria for
Positive Encounter	Negative Encounter

Section 2: Learnings from childhood

A. Our most intensive language and cultural learning takes place in childhood. At that time we are taught, among other things, how to meet strangers and how to relate to them. Remembering -hat you will be a stranger to people of the new culture, reflect back on your own childhood and think about some of the things you were taught about strangers in general. When, where and how did you learn these attitudes? Who taught them to you?

Teachings About Strangers

B. During your childhood and youth you also learned certain attitudes toward people of difference different ethnic groups, different religions, different nationalities, etc. Thinking either in general terms or in terms of specific groups, what are some of the things you learned about people who are not from your "own" group?

Teachings About People of Difference

(Compare the two sets of attitudes and discuss in your group.)

C. In working Sections 1 and 2, you may have discovered that you still have some biases about people of difference; some things that you need to be conscious of, check out occasionally, and work on. These kinds of things, often picked up during childhood or through a movie or a National Geographic, can have a profound impact on how we begin dealing with another culture; and, if unexamined, they can, seriously hamper our cross-cultural effectiveness. Bringing potential biases to a level of consciousness is a first and critical step. Please write down those "teachings" from your past that you think may still affect the way you will enter a new culture. Once you have noted these potential biases then move to the next part and jot down some specific ideas on things you could do to "work on" these biases (i.e., check your information source, try something out for yourself rather than accepting someone else's word).

Biases about people of difference I may have and/or need to work on.

Ideas and things I could do to work on these biases.

(Share and discuss in your group.)

Section 3. Past experience in one culture-personal needs and the task of satisfying old needs in new ways

Following is the outline of a chart. The vertical spaces indicate months of a past year (for you to fill in) while the horizontal lines from "0" to "10" indicate how you were feeling, with a "10" indicating a real "high" for you, and a "0" indicating a real "low." Draw a line chart, like a sales chart, to show how you felt from month-to-month during the year described. Then list and describe the qualities of these major highs and lows.

A. Indicate by a flow line on the chart below how you experienced your past year.

Months

10

1

Describe the kinds of things that were happening when you were experiencing major highs.

Describe the kinds of things that were happening when you were experiencing mayor lows.

(Share with your group.)

B. During the past year when you were experiencing highs, you were probably meeting some important needs. When you were experiencing lows, there were probably some needs not being met. Reflect on the "picture" of highs/lows that you have drawn for the past year, and try to extract those needs which seem to be important for you (e.g., a need to have contact with two or three close friends, a need for some occasional time alone).

Important Needs

(Share with your group.)

So what good is all this? Is it useful?

To everyone, perhaps not. Some people are reluctant or unable to attempt an analysis of their own behavior. It is certainly not necessary, but each of us goes through life trying to arrange things so that we will be happy. Our needs as they develop determine many of the choices we make, and we learn ways to satisfy our needs. This process normally goes on without much conscious attention.

However, the Peace Corps Volunteers find themselves rather quickly transplanted into new and unfamiliar situations, where the taken--for-granted ways of meeting needs might be substantially different. Although our needs may evolve during the two years, the changes in basic needs are neither rapid nor easily manipulated. We are faced, therefore, with the task of satisfying our old needs in new ways. While this is not a terribly difficult process for most Volunteers, it may require some conscious analysis and thought for the first time. Knowing something about your individual balance of needs may enable you to better understand the sources of unhappiness, and thus improve your chances of taking effective action.

If I know something about my personal needs, what does that information tell me exactly?

This knowledge has the follow uses:

- 1. It can help you predict your emotional response to many situations, permitting you to avoid, approach or modify them as appropriate,**
- 2. It can help you identify the causes of discontent and depression, and suggest ways to alleviate them.**

3. Perhaps most important, it will allow you to be active and creative in planning ways to meet your basic needs in the new culture. Being active in finding new and culturally appropriate ways to meet your "old" needs is an integral and exciting part of cross-cultural learning. Of course, how you analyze your needs is highly individualistic, and no one would suggest that knowledge of one's needs will in itself solve anything. However, it is well known that Volunteer effectiveness and happiness overseas is determined by the ways in which needs are addressed or not addressed. As we have seen from the charts, we normally go through highs and lows here in the States. This will happen overseas, and the ups and downs will tend to be exaggerated (at least at first). "Lower lows" can help cause you to be ineffective, unrealistic, ethnocentric, even to go home early. Thus, the ability to be clear about your needs and take an active role in planning to meet 'em is critical, and, in those instances where you are unhappy, you will be better able to identify the causes and take effective action to make the situation better.

Section 4: Leaving our own culture effectively

Much of how we experience a new culture is highly dependent upon how we feel about the culture or situation we have just left and how well we have left it. Preparing for a new culture means in large part being successful in bringing satisfactory closure to our past involvement. Our freedom to leave present situations and friendships allows us to enter new situations and friendships more easily.

Moreover, many people have either had very difficult times as Volunteers or have left early because of "unfinished business" back in the States. For example, an individual may have a strong relationship with another and decide to go into the Peace Corps even though the partner does not. This situation needs careful consideration, as it has been the Peace Corps' experience that such situations generally lead either to leaving early or to the end of the relationship. This is but one example of the critical role that "leave-taking" will play in your Volunteer experience.

Reflect carefully on the situation you are planning to leave or have just left. How do you feel about it? Are there things you wish you had done before you left or as you were leaving? How have you taken care of close relationships? What things did you leave well? Please jot down some of the good points and ragged edges connected to your leaving.

Once you have done that, identify some positive actions you could take to deal with the ragged edges (and maintain the good points). Then try to develop some personal ideas for leaving a culture, home, friends, pets, etc.

Good Points Ragged Edges

Positive actions I might take to maintain good points and to deal with ragged cages.

Ideas for leaving-taking of culture and friendships.

(Share and discuss with your small group.)

Section 5: Responding to a new culture

So far you have been drawing upon your own experiences and sharing them with the rest of the group. This is where most real learning must take place. Sometimes, however, it can help to examine the concepts and theories of people who have either studied or been through cross-cultural experiences to aid in crystallizing your learnings. The three short readings which follow contain some ideas which people who have had successful cross-cultural living experiences have pointed out to be important. Our feeling is that they may help you get a better picture of the experience you will be going through and will help you identify some of your cross-cultural learning needs.

A. Responses: Culture Shock

Many people who enter and live in a new culture for more than a month experience what has been labeled as culture shock. This means the newcomer will experience feelings such as not belonging, alienation, unworthiness or inadequacy, and may lose touch with his or her own real feelings. In many ways the person will be experiencing real mental distress, but what must be recognized is that culture shock is a normal process. It is something we all may experience to a greater or lesser degree.

We do experience culture shock differently, however. Some people tend to get very depressed. This may mean they withdraw from people of difference and have little energy to put forth in doing anything that is new or requires much effort. They feel victimized, and they look at others--particularly those in the new culture--as being the cause of their pain and torment.

Others may search desperately for similarities with their own culture or background and then try to rely upon these similarities for support to the exclusion of other activities. Those just out of a university environment may try to recreate some of the dominant qualities of that environment in their new situation. If they were heavily involved in sports, for example, they will try to get involved in similar activities in the new culture. If they previously relied a lot upon books they will spend much of their time in the new culture simply reading. The tendency is to seek out something familiar from the past in an effort to dominate and exclude the present as well as to preserve one's own ego or sense of identity. This is normal and sometimes, in fact, useful to do especially if it is done to help get you over a period of culture shock. The first problem, however, is to recognize symptoms of culture shock.

The following are some of the signs that may (they don't always) indicate you're on the old culture shock trip:

1. Yearning for certain foods or personal comforts not readily available in the new culture.

2 Escaping to maximum structure/minimum contact situations such as movies or formal restaurants.

3. Hanging around with fellow Volunteers or others of your own ethnic group.

4. Finding yourself talking about "them", "these people" and blaring "them" for the problems you're having in your work or in your personal adjustment.

5. Finding yourself drinking excessively, or spending unusual amounts of time:

sleeping

eating

bathing

grooming

yourself

daydreaming

playing cards (especially solitaire)

reading when you should be doing other things

organizing and reorganizing your room, equipment, etc., or

6. Avoiding contact with people of the new culture in any of a hundred other ways which all boil down to one fact--you may be in culture shock, and you owe it to yourself as well as to those around you to start doing something about it.

One final note; the term "culture shock" is a very apt and descriptive term. However, it may also imply that there is something so alien about other cultures that they "shock" newcomers. We do not mean to imply that at all: Rather, when an individual enters a different culture, it is often the absence of taken-for-granted, everyday things from his/her native culture which causes the shock. These "everyday things" can be access to newspapers, television, books, friends, certain kinds of foods, and so on. Because these

things are taken for granted, it may cause discomfort or "shock" when they are no longer there, or at least not there automatically, nor in the form one is used to. Generally, it is that period during which one realizes that something is missing or different: and before one has substituted and/or accepted new "everyday things" available in the different culture wherein culture shock may be experienced. (This, of course, assumes that one is not simply ethnocentric or unable/unwilling to adjust; people who have these characteristics present serious problems when working overseas!)

Choose at least two of the signs (numbers 1-6, above) write them down, and decide at what point they cease to be signs of simple homesickness and begins to be symptoms of genuine culture shock.

Share and discuss your opinions with your group.

B. Responses: Resolving Culture Shock

Old-timers say culture shock can only be lived through, not dealt with. This does not seem to be true if you can just take the first step of recognizing that you are in culture shock. The whole thing is usually so deceptive--and we are so clever at inventing games to screen out the reality--that we cannot or will not admit what we are going through.

If we can get through to our real feelings the best thing to do is to face the reality and then deal with it. At this point we can acknowledge that we feel terrible (which is okay because it's what everyone feels in a similar situation) and we can foresee the actions we need to take to overcome these feelings. Action is terribly difficult for people in depression because they feel so ambivalent about things, but it is only action that will help. Action cuts through ambivalence and begins to resolve it.

An important question to answer when you recognize that you are feeling "down" and lonely, and all the rest, is simply, "What can I do to make myself feel more positive about

things?" People in culture shock tend to be very puritanical and demanding of themselves, which only heightens the sense of discomfort and inadequacy.

Remember that this process is simply taking note of the conditions present or absent when you experience happiness or discontent. THERE IS NO "BEST" ORDERING OF NEEDS. Perhaps the most central idea to be conveyed here is that WE SHOULD SATISFY OUR NEEDS IN CULTURALLY APPROPRIATE WAY'S RATHER THAN SUPPRESS THEM. In fact, an important part of our pre-service cross-cultural training will be aimed at helping you to do this.

C. Responses: Feedback and Overidentification

Some things to keep in mind:

- 1. Feedback is the way we learn how well or how badly our actions are coming across. Sometimes we learn because people tell us directly; sometimes we learn because of other, less direct means (nonverbal cues, for example).**
- 2. Feedback "happens" all the time, and in every culture. It's a question of whether we choose to "see" it and take it seriously. (Some examples of feedback--someone runs across the street to meet you and say hello as opposed to ducking in the nearest alley; someone falls asleep while you are talking to them; people want you to take leadership roles in committees.)**
- 3. Feedback is often very subtle. It is usually only to our closest friends that we ever talk frankly about certain actions and how we felt about them, and even then our sharing of feelings is limited.**
- 4. Feedback, both verbal and nonverbal, is cultural. It takes a long time to learn what it really means**

- 5. In a new culture, feedback systems may be widely different from what we're used to. At first they may be totally unintelligible. What meant "you're doing fine" in your culture may mean "don't come any closer" in another.**
- 6. When feedback is limited or confusing a common tactic is to mimic (to do what you see others doing) by picking up and modeling their actions and mannerisms.**
- 7. Modeling is a basic form of learning, but it has to be in character with your other actions or it may appear ridiculous.**
- 8. When carried to extremes mimicking looks phony, and it is called overidentification. Examples would be wearing moccasins the first day on an Indian reservation, or talking ghetto talk when everybody knows you're from the white suburbs.**
- 9. Overidentification can really turn people off. You're saying you think you can fool them with this act, and that. you're so clever you can pick up in a day or so a cultural identity that they've spent years putting together.**
- 10. It's not real and they know it. You're probably not being yourself. Either the change to the new behavior was too sudden to be sincere, or even worse, you act differently when you're with "your own kind."**
- 11. The only way out is to be yourself and find ways to be reinforced for it. Get to know someone who will tell you honestly how you're coming across in the new culture. If others from your own culture are available, help each other feedback on how you're doing in the new situation.**
- 12. Be sensitive to the ways people in the new culture give each other feedback. Then look at what they're "telling" you (in one way or another).**

Section 6: Identifying to your cross-cultural learning needs

Having read and discussed the articles in Section 5 and looking back on the work you have done in Sections 1-4, we would like you to make an attempt to identify your cross-cultural learning needs. You might want to reflect back particularly on Section 3 where you were trying to pinpoint some of your needs over the last year. For example, one cross-cultural learning need might be to learn about the foods in the new culture, and to learn culturally appropriate ways to cook it and eat it. A less obvious learning need might be as follows: to identify ways to spend some time alone in a culture which (at least from what you know now) does not value "aleness." Other learning needs might revolve around your Volunteer assignment area (e.g., health extension), language and communication, entertainment, and so on. Learning needs may even involve identifying things you could do to take care of any ragged edges you have from leaving this culture, and things that you might be able to do to maintain back home relationships and contact (Section 4). In addition, they should reflect continued work on any biases you may be taking with (Section 2). Reflect individually, then, and use the space below to take an initial cut at writing your individual cross-cultural learning needs.

Cross-cultural learning needs

(Share with your group. If someone else's sharing reminds you or something you forgot, or seems like a good idea, you can use the space below to add to your list.)

Final Note:

These are your cross-cultural learning needs as you see them right now. The list will evolve as you gain experience in the new culture, but this provides an excellent starting point. Please remember to bring this manual with you, and this Section in particular, as it will form the basis for one of your first cross-cultural training sessions during the first week or so of pre-service training.

Session 6: Role of the volunteer in development work (rvdw): the helping relationship as a volunteer

Time: 7:30 AM to 10:30 AM

Goals:

- **To identify some of the ways in which individuals help one another.**
- **To discuss participants' own personal motivation for helping and their own personal theory of "helping."**
- **To experience and articulate feelings individuals have about being in a position of receiving help after a session in which they receive help from another participant.**
- **To articulate feelings about being a helper after actively helping another participant in a training session.**
- **To discuss some of the dilemmas -- political and personal -participants may confront as volunteers around the notion of "helping."**

Procedures:

Time	Activities
5 Minutes	1. The trainer briefly discusses the goals of the activity.
10 Minutes	2. Participants complete the inventory.
	3. Triads are formed and the participants in each triad identify themselves as A, B, and C.
5 Minutes	4. The following instructions are given by the facilitator:
	During the first round, participant A is to be the first "helpee"; he is to present his results

	from the inventory. Participant B is to be the first "helper"; his task is to begin a helping relationship with the "helpee". Participant C is to be the first "observer"; he receives a copy of the Helping Skills Observer Sheet.
90 Minutes	5. Round One is begun. The facilitator stops the process after twenty minutes and instructs participant C to report his observations and lead a discussion for ten minutes.
	6. Round Two begins. Participant B becomes the "helpee"; C becomes the "helper" and A becomes the observer (thirty minutes).
	7. Round Three begins. Participant C is the "helpee"; A is the "helper" and B is the observer (thirty minutes). At this point, the trainer puts flip chart paper on the walls near each triad.
	8. Immediately after Round Three, the triads are instructed to spend a few minutes in order to identify the behaviors that assisted and that hindered their helping relationships. They should be prepared to share these in the large group after the break (five minutes).
TAKE BREAK	
15 Minutes	9. The total group reconvenes and the trainer asks participants what they felt hindered their helping relationships. A recorder lists these on newsprint. The trainer repeats the process, this time asking for those behaviors that assisted their helping relationships.
20 Minutes	10. Stepping back from the lists, the trainer should then ask the participants if anyone would like to make some generalizations about what is needed in order to have a successful helping relationship.
15 Minutes	Trainer asks questions like the following (from news print):
	- What did it feel like to be helped and what can we learn from this?
	- What did it feel like to be a giver of help and what can we learn from this?
	- What may be different about helping others overseas?
	- How might cultural variables affect a helping relationship?

	- How can I approach asking others for help and helping others (be they PCVs or HCNs)?
	- What is your personal motivation for helping others?

Materials:**• "Helping-Skills Inventory"**

FOR STAFF USE ONLY (Representative Sample of Work Generated by Participants in Small Groups/Copied from Newsprint). THIS IS NOT A HANDOUT FOR PARTICIPANTS.

Behaviors that Assist in Setting up a Helping Relationship:

Put the problem in perspective

Give confidence

Be truly interested

Ask questions that allow helpee to find real anxieties or problems

Relate experience

Be actively involved (listening)

Ask questions (relevant)

Create comfy atmosphere (putting helpee at ease, developing trust)

Help provide reasonable solution

Don't be overly solution oriented

Thought provoking silences

Let helpee define problem and re-define

Good eye contact and body language

Draw out of relevant examples

Rephrasing the problem to help him/her to be clear re: what she/he

is saying and that you're perceiving it correctly

Sincerity and sensitivity

To relate successfully overcoming past experiences to present problems

Be sensitive to the type of person you are dealing with

Effective listening

Clarifying the problem

Establish rapport

To question, probe

To clarify what you hear the person saying (to help them understand how they are coming across)

Let the person talk

Ask for examples or relate to their problems by giving personal examples occasionally

Try to help person focus the issue

Help person understand what situation may be once problem is resolved

Help to examine different alternatives Create a comfortable non-threatening atmosphere

Behaviors that Hinder in Setting up a Helping Relationship:

Rambling on a topic or suggestion (the helper)

Summarizing with a lack of depth (i.e., one work summarizations)

Reiteration (total paraphrasing and being too empathetic)

Talking too much

Making judgements - telling the person what's wrong, what to do to solve problems, etc.

Looking bored (or being bored)

Assume solution is possible and desirable

Don't get involved in yourself (if you are the helped)

Helper and helpee shouldn't expect too much from one session

Insensitivity

Interrupting over-simplification

Dominating the conversation

Not understanding the problem, person**Assuming too much****Prying****Judging****HELPING - SKILLS INVENTORY**

This check list is designed to help you think about various aspects of the behaviors involved in helping. It gives you an opportunity to assess your skills and to set your own goals for growth and development. To use it best:

- 1. Read through the list of activities and decide which ones you are doing the right amount of, which ones you need to do more of, and which ones you need to do less of. Make a check for each item in the appropriate place.**
- 2. Some activities that are important to you may not be listed here. Write these activities on the blank lines.**
- 3. Go back over the whole list and circle the numbers of the three or four activities which you want most to improve at the present time.**

General Skills	OK	Need to Do More	Need to Do Less
1. Thinking before I talk	-	-	-
2. Being comfortable with my educational background	-	-	-
3. Being brief and concise	-	-	-
4. Understanding my motivation for working in a helping	-	-	-

11. Understanding my motivation for working in a helping profession			
5. Separating personal issues and work	-	-	-
6. Listening actively to others	-	-	-
7. Appreciating the impact of my own behavior	-	-	-
8. Being aware of my need to compete with others	-	-	-
9. Dealing with conflict and anger	-	-	-
10. Building an atmosphere of trust and openness	-	-	-
Sensing and Diagnosing			
11. Helping clients to discover their own problems	-	-	-
12. Asking direct questions	-	-	-
13. Inspiring the helpees confidence in my ability to do the job	-	-	-
14. Willing not to be needed by the helpee	-	-	-
15. Offering to find answers to questions	-	-	-
16. Drawing others out	-	-	-
17. Expecting people to use my solutions	-	-	-
18. Helping people generate solutions	-	-	-
19. Accepting the helpee's definition of the problem	-	-	-
Job relationships Do More			
20. Saying no without guilt or fear	-	-	-
21. Working under pressure of deadlines and time limits	-	-	-
22. Setting realistic goals for myself and the client	-	-	-
23. Working comfortably with authority figures	-	-	-
24. Letting someone else take the glory	-	-	-

25. Working with people I do not particularly like	-	-	-
26. Giving in to client restrictions and limitations	-	-	-
Problem Solving	-	-	-
27. Stating problems and objectives clearly	-	-	-
28. Summarizing discussions	-	-	-
29. Selling my own ideas effectively	-	-	-
30. Helping people maintain a logical sequence for problem solving	-	-	-
31. Challenging ineffective solutions	-	-	-
32. Asking for help from others	-	-	-
33. Evaluating possible solutions critically	-	-	-
34. Contributing various techniques for creative problem solving	-	-	-
Implementing			
35. Attending to details	-	-	-
36. Helping people make use of their strengths and resources	-	-	-
37. Taking responsibility	-	-	-
38. Changing plans when emergencies come up	-	-	-
39. Building and maintaining morale	-	-	-
40. Requesting feedback about the impact of my presentations	-	-	-
41. Controlling my anxiety while I am performing my task	-	-	-
42. Intervening without threatening my colleagues or the people I am helping	-	-	-
43. Intervening at the appropriate time	-	-	-
44. Admitting errors and mistakes	-	-	-

44. Admitting errors and mistakes	-	-	-
45. Admitting my own defensiveness	-	-	-
Evaluating			
46. Assessing my own contributions realistically	-	-	-
47. Acknowledging failure	-	-	-
48. Feeling comfortable with someone reviewing my work	-	-	-
49. Dealing with unpredicted changes	-	-	-
50. Relying on informal feedback	-	-	-
51. Letting go when the task is finished	-	-	-
52. Arranging for next steps and follow-up	-	-	-
53. Attributing failure to the helpers "resistance"	-	-	-

HELPING - SKILLS OBSERVER SHEET

The helper:

- _____ 1. Helps the helpee to analyze problems.
- _____ 2. Helps the helpee to generate solutions.
- _____ 3. Acts as a clarifier to the helpee.
- _____ 4. Acts as a summarizer.
- _____ 5. Contributes suggestions from experience and knowledge.
- _____ 6. Gives the helpee ready-made answers.
- _____ 7. Assumes that the helpee has presented the problem accurately.
- _____ 8. Indicates that he is listening.
- _____ 9. Picks up on nonverbal cues.
- _____ 10. Talks more than the helpee does.
- _____ 11. Shows interest in the helpee.

- _____ **12. Paraphrases.**
- _____ **13. Confronts and/or challenges the helpee.**
- _____ **14. Collaborates with the helpee to define problem areas.**
- _____ **15. Helps plan follow-up and next steps.**

What seems the most helpful thing the helper said or did?

What behaviors seemed least helpful?

Other Comments:

Session 7: Individual interviews

Optional

Time: 20-30 minutes per interview

Goals:

- **To provide feedback to each participant on his/her performance**
- **To get to know participant on an individual basis**

Trainer's Notes:

1. These interviews are not a "chat." Trainers need to decide beforehand what feedback is to be given; care should be taken to communicate specific positive and negative feedback.

Procedures

Time	Activities
20 to 30 Minutes per	1. The Training Director should conduct the initial interview using the

person	following format:
	Interview
	1. Why the Peace Corps?
	2. Do you understand the Assessment Dimensions?
	3. Is there anything you have left unfinished? If so, what do you plan to do about it?
	4. What areas have you identified for yourself that you need to work on?
	5. What do you feel your strengths are?
	6. We would like to give you the following feedback.

Session 8 Volunteer in development and change

Time: 3 PM to 6 PM

Goals:

- **To simulate certain conditions of a development worker.**
- **To practice problem identification, strategy building and solution finding.**
- **To explore notions, assumptions, and personal theories about change.**
- **To practice implementing solutions and strategies.**
- **To examine certain variables of development work, such as ambiguity, implications of working within system as opposed to outside system, volunteer need for urgency in change process.**

Procedures:

1. A progressive case study will be used for this session. It should be combined with role plays and simulations which emerge from each part of the case study. (Suggestions are

included in the trainer's copy after each part.)

2. This session is done by dividing reference groups into smaller groups of five participants. The participants will read separately each section of the case study, Parts I-IV. They should analyze the situation, identify any problems, discuss the appropriateness of the volunteers' responses and their implications, and suggest alternative strategies. After each part, the groups will meet with the trainer(s) to share their analyses, reactions and strategies. Spontaneous role plays emerge from the discussion at this time. After discussion is completed, the next section is given out and the process is repeated in Part V.

3. At the end trainer asks participants what feelings they felt the development worker must have had during this case study. These are listed on newsprint. The trainer can close session by promising the trainees that they will experience these same feelings during their own volunteer experience.

Materials:

- **The Case Study of A Development Worker, adopted from the Peace Corps training program in Liberia during the summer of 1973. Developed by Jack Koklmyers, James McCaffrey, Ed Salt and James Tashima.**

Trainer's Notes:

1. While participants are working in groups of five, the staff does not play an active role. That is, the staff does not facilitate the small group problem solving discussion. Staff may observe the groups during this time, and then facilitate the discussion while participants share their reactions after each part of the Case Study.

2. Processing questions and suggested role plays are included in the Trainer's Guide for

the Case Study. They should not be included in the edition given to the participants.

3. Trainers are to use their discretion in deciding when simulations are to be done based on time, staff expertise and the flow of discussion. Parts 1, 3, and 5 are rich in issues and situations for simulations.

CASE STUDY OF A DEVELOPMENT WORKER

Part I

This is a case study of a PCV working in cooperatives. He viewed this position as an important one, working in the beginnings of the country's Cooperative Movement. The Minister of Agriculture, whom the Volunteer met during training, reinforced the importance of the job he was about to begin. Since the Minister's home area was the same as the Volunteer's working area, the Minister explained in detail to the Volunteer what he knew of the people, their interest in starting a cooperative, and his expectations of the Volunteer's performance.

After nine months on the job, the Volunteer found that he was concentrating on one rice cooperative. It had taken a good part of the first nine months of his stay to settle into a life style that he was comfortable with. Although he had made a sincere start in trying to learn the local language, he gave it up after a few weeks. He said that he didn't need it on the job and had a perfectly adequate interpreter through whom he could communicate to the cooperative members. Much of his time was spent moving into his town and building relationships with the townspeople he considered key to his success as a cooperative worker. He applied the same process to the job, establishing contacts and building relationships with those in the Ministry of Agriculture on whom he knew he would eventually have to rely. This he did on both the headquarters and district level. This work was slow and frustrating, but within nine months the Volunteer felt he had established some very strong relationships with many people in the Ministry and in town. Needless to

say, he knew most of the agriculture volunteers in the country and often spent time with them, talking over their frustrations.

While all this was happening, the Volunteer was in the process of defining his job. Although he was supposed to work with six budding cooperatives, he found himself spending more and more of his time with the one cooperative in his town. This was partly due to the difficulties he had in obtaining gas from the Ministry, partly due to the Minister's interest in the project, and partly due to the high visibility of the cooperative (It was on the main road).

He became the key advisor to the cooperative, working closely with the Chairman of the cooperative and the Board of Directors. He spent a considerable amount of time with each of the twenty members of the cooperative as well, visiting their homes with his interpreter. The result of his work was a group of very enthusiastic farmers whom he had taken from skepticism to active participation in nine short months. They had agreed to start a communal pilot rice scheme of some 40 acres, using one piece of land that they had obtained from the clan chief.

Since this was the first project that the cooperative was working on, both the members of the cooperative and the people of the area were watching it very closely. One measure of their wariness in spite of their enthusiasm was that each cooperative member made sure that his own traditional plot of land was prepared for the upcoming rice season. During the time that the Volunteer was building up the members' enthusiasm, he had to cope with many periods of depression, when he felt that he would not be able to bring the members to a state of readiness in time for his first full season. In fact, it took a full four months for the members and their leaders to decide that the project was at least viable with a fair chance of success.

To reach that point, the Volunteer and the Chairman of the cooperative had together

arranged for certain commitments from the Ministry of Agriculture. The Ministry carried out a soil survey to determine if the plot of land was indeed suitable for rice cultivation. The Ministry promised fertilizer and helped to arrange a loan with which the members of the cooperative bought the fertilizer. The Ministry promised to supply improved rice seed, and the members had raised money for the seeds by holding a dance, a beauty contest, and by raising their fair share of membership fees. This money they sent to the Ministry via the Volunteer (when he was going down to the capital for his gamma globulin shots) some two months before the seeds were due to arrive.

By the end of April, the members and the Volunteer were fairly satisfied with their progress. A plot of land had been selected and it had been cleared and prepared by the members. The fertilizer had arrived and was stored in a shed attached to the Volunteer's house. A number of technical advisors from the Ministry and UNDP had visited, each giving a lecture or demonstration which the members felt worthwhile. The money for the seed was with the Ministry, and the Director of the Division had promised that the seed would be available by mid-April. All things considered, the Volunteer was quite pleased with the progress of his work, and had been suggesting to a number of other Volunteers, Ministry officials, and cooperatives that they may want to visit his cooperative during the next months in order to use it as an extension demonstration in cooperative work.

By the middle of May, four weeks late, the seeds had not yet arrived. The Volunteer and cooperative members were becoming worried. People were expecting the first rains by late May or very early June, and the rice had to go in just after the first rains or the yield would probably be severely reduced.

Finally, the Chairman of the cooperative and the Board of Directors met in a special session to talk over the tardy seeds. After several hours of palaver, they decided to send an urgent message to the Division Director in the capital city inquiring about the seeds. The Chairman, whose brother worked for the Ministry in the nearby county seat,

suggested using the Ministry radio network to send a message to the capital city.

The Volunteer, who had returned the previous day from the county seat, mentioned that the radio was not in good working order, and it was quite difficult to communicate clearly with any assurance that the message was properly understood in the capital city. By chance, the Volunteer knew that the Peace Corps mail truck was due to pass through the town that afternoon on its way to the capital. The members agreed and the meeting ended with the Chairman and Volunteer drafting a letter to the Director of the Division.

As the Volunteer and the Chairman composed the letter, the Volunteer decided to send the letter to the Peace Corps Agricultural Programmer, asking him to take it by hand to the Division Director. He felt the situation was serious enough to ask for the Agricultural Programmer's help. If nothing else, he felt that the letter may carry a little more weight if the Agricultural Programmer discussed it with the Division Director personally.

Part II

Three days later, when the mail truck was returning up country, the Volunteer received a letter from the Agricultural Programmer in the capital city. The Agricultural Programmer had visited the Division Director, and had obtained an assurance from the Director that the rice seeds were just being arranged and should be on their way within the next ten days. The Volunteer visited the Chairman and Board of Directors and the group was considerably reassured by the Agricultural Programmer's findings. They adjourned to a local bar to celebrate their good fortune.

Ten days later, the first rains fell, good soaking rains which promised a good year if only the seeds were on hand for planting. However, they had not yet arrived. The Volunteer and the Chairman called another meeting of the Board of Directors (although they had some difficulty in contacting some Directors because they were out on their own lands planting their own rice crops).

During the meeting, the group decided that they had at the most another two to two and one half weeks to get the seed in the ground. After that, it would be almost too late. They decided that more urgent action was needed, and began to make plans to send a delegation to the capital to trace the missing seeds and to try and bring them back with the delegation. Plans were made, but when they began to talk about transport, it was found that no one could afford the trip out of their own pocket. The Treasurer of the cooperative was consulted, but it was found that almost all the cooperative's funds had been sent almost two months earlier to pay for the seeds. They had no cash on hand.

One of the members then asked the Volunteer if he could go down himself, using his own vehicle. The Volunteer's vehicle was not in working order, and so that option seemed to be useless. The Volunteer began to feel the pressure build, for he knew the next ten days were going to be crucial to the success of the cooperative. After giving it some thought, he decided to pay for taxi fare out of his own pocket for the trip. The Volunteer also wanted to involve someone else from the cooperative, so he asked the Chairman if he would accompany him and agreed to fund his trip for just this one time.

The next morning, the Volunteer and the Chairman left for the capital.

Part III

The next morning, the Volunteer met the Chairman at the Ministry headquarters, and they together went to see the Director of the Division. When they went into his office, the secretary informed them that the Director was attending a conference on the "Cooperative Movement in Africa" in Lagos, Nigeria and would not be back for another two weeks. Acting in his place, she said, was the newly appointed Deputy Director of Cooperatives.

The Volunteer and Chairman went into the new Acting Director's office, a man whom the Volunteer had never met but the Chairman knew from early grade-school. After some reminiscences by both the Chairman and the Acting Director, the Volunteer broached the

problem that he was facing. Speaking on behalf of the cooperative, he outlined the problem to the Acting Director stressing the promises the Ministry had made to him, and strongly asked for some "immediate action." The Acting Director was not familiar with the case, and was not sure what authority the Director left with him to deal with the situation. However, he promised the Volunteer that he would look into the matter and asked him to return the next morning. The Volunteer, although unhappy with the response, agreed. After he left, the Chairman and the Acting Director continued to share memories, and the Acting Director invited the Chairman home for lunch with his family.

Up to this point, there were a number of different reactions from the persons involved. The Volunteer, under pressure for the success of his project, felt upset by what he regarded as the Ministry's "betrayal" (his words) of his project at a crucial moment. He did not know the Acting Director, and was not sure that he would come up with the seeds. The Acting Director, on the other hand, was confused by the whole matter. He had been transferred to the Division only two weeks before, and was just beginning to get his feet on the ground. He was happy to see his old friend, the Chairman, but was a little upset by the somewhat abrupt manner of the Volunteer. (This, he decided, was nothing to be concerned about, and was probably just the normal way this American acted.) The Chairman, who was not used to working at such high levels of the Government, was a bit overawed by the situation, and was worried about what the lack of rice seed would do to his food supplies and his reputation, but assumed that the Volunteer had everything under control.

The Acting Director spent most of the afternoon tracking down the various arrangements that the Director had made for this cooperative, and finally determined that the seeds were indeed on hand and only required some final processing and packaging and they would be ready -- perhaps within a week or so. Some seeds had already gone out (they had only two trucks available for transport) to some cooperatives and other buyers, and it turned out that this Volunteer's request was one among another 156 left to go.

Part IV

That night the Volunteer was attending the Peace Corps' party for some finishing staff members of the Peace Corps. By chance, the Minister of Agriculture (the Minister from the Volunteer's area) was attending the party. Since the Volunteer knew this man from his training program, and since he had visited his area several times in the past months, the Volunteer decided to talk to the Minister about the problem he was having. The Minister reacted very strongly and very angrily to the Volunteer's somewhat pointed description, and promised that he would look into the matter and do all he could to help.

The next morning, as the Volunteer was collecting his mail at the Peace Corps mail room, he ran into the Agricultural Programmer who asked about the problem he was having. After listening to the events, the Agricultural Programmer mentioned to the Volunteer that the United States Embassy had a self-help fund from which he might qualify for assistance in buying the seeds. Part of the arrangement, however, was that the Volunteer would have to take responsibility for the funds and project, for a national was not allowed to do so. The Volunteer was glad to have another option available, and said that he would look into it before he left.

After leaving the Peace Corps office, the Volunteer returned to the Ministry to see the Acting Director. Although the Acting Director promised that the seed would be available in three days, he said the Volunteer would have to arrange his own transport; however, the Volunteer also noticed that the Acting Director was very abrupt and cool towards him. The Volunteer left the Ministry unsure about the promise that the Acting Director gave him, and did not really trust his promise, anyway.

The Volunteer knew that if he did not obtain the seed within the next week, it would be too late. To keep his options open, he decided to go to the Embassy to investigate the self-help fund.

The Embassy officer cordially welcomed the Volunteer, and said that they would process his request in a hurry and would have a decision for him in three days.

The Volunteer then met the cooperative Chairman, and together they caught a taxi back to their town. On the ride up, the Volunteer was very happy with the results of their trip, and explained enthusiastically the two options that he had worked out for the cooperative. From at least one of the sources, he told the Chairman, they should be able to get the seed by the end of the week. The Chairman did not seem to share his enthusiasm, although the Volunteer did not notice it for another hour or so.

Finally, noticing that something was bothering his companion, he asked him what the problem was. After some fencing about , he discovered that the Chairman had visited the Acting Director after the Volunteer's visit that morning, and the Acting Director had angrily chastised his old friend for going to the Minister with their problem. The Chairman was put in a dilemma (for he did not want to pass the blame on to the Volunteer, who was their key to the seeds, but at the same time did not want to lose his friend). This he did not express to the Volunteer directly, and the Volunteer commiserated with the Chairman about the evident lack of understanding the Acting Director showed about the seriousness of the problem that faced the cooperative.

Part V

The seeds finally arrived in the capital. The Embassy turned down the Volunteer's request because they "needed at least four weeks" to fully investigate the project. However, the Volunteer had finally got his pick-up in working order and had gone down to the city to collect the seed personally at the end of the week.

Unfortunately, the seeds that arrived turned out to be of poor quality. The Volunteer had been given the wrong sacks of seed from the warehouse. The yield for that year promised to be a very poor one. A month or two later, the Volunteer noticed that the members of the

cooperative did not attend their meetings as enthusiastically as they used to. The Chairman seemed to be cooler towards the Volunteer, and the Volunteer eventually found out that the Chairman and the Acting Director were no longer on friendly terms, but assumed that this was because of the poor seed that the Ministry had sent them.

Session 9: Nutrition

Time: 7:30 PM - 8:30 PM

Goals:

- **To introduce the concept of "good nutrition"**
- **To explore the basic nutrient need of people**
- **To identify the nutrient value of categories of food**
- **To identify and research the uses and nutrient value of locally available foods at training site and in Host Country**

Overview

This session will focus on basic nutrition concepts, classification of nutrients, and the characteristics of a nutritional dish. Trainees will examine their personal eating habits and daily diets in relation to nutritional needs, and discuss how their eating habits have changed during training and may change while living overseas.

Procedures:

1. Trainer introduces the session by remarking that for most of us "good nutrition" is not a new concept. We hear about the use of chemical additives in food; the dangers of junk and fast foods; and our mother's concerns for "clean up plates" and "eating green vegetables" that are good for us. But despite the concern about "good nutrition" that we have been

exposed to, how many of us actually pay close attention to what we eat? For many of us our food habits have changed here at the training site and are sure to change even more radically once we are overseas.

"We are what we eat" The quality of food which we take into our bodies determines to a great extent the quality of life we have.

The purpose of this session is to examine this area of food and nutrition so that we can maximize our nutritional intake as trainees and in the future as PCVs.

2. Trainer summarizes the goals of the session which are listed on newsprint.

3. Trainer begins next segment of exercise with the following introduction: In order to better understand the concept of "good nutrition" and how this relates to us personally we are going to take a close look at our personal eating habits and daily diets. First, however, let's take a look at food in general. The trainer facilitates discussion around the following questions: (answers are written on newsprint)

a. What are nutrients? What are the major nutrients found in foods?

b. What are the important functions of these nutrients?

Trainer then talks about the functions of the nutrients in various foods. Trainer shows following chart which has been put on newsprint.

THREE MAIN FOOD GROUPS

GROUP I	GROUP II	GROUP III
(protective foods)	(energy foods)	(body building and repair foods)
Fruits and	Cereals, Grains,	Meat, Fish, Poultry,

Vegetables	Starchy Roots,	Eggs, Milk, Cheese,
Extracted Oil	Yogurt	
Beer and Wine		
Provide water, minerals and vitamins	Contain high amounts of carbohydrates	Contain a high percentage of protein and/or fats

Trainer continues "As you can see, foods fall into one of three groups depending on the major nutrients they contain."

4. Trainer now asks each trainee to recall what they have eaten and drunk in the last 24 hours and place each of these foods in the nutrients group it belongs. Trainees complete the 24 hour diet recall.

5. The training group is then divided into small groups and encouraged to discuss their individual findings. Possible questions to facilitate the small group discussion might include:

- a. In which food group did most of what you ate and drank yesterday fall?**
- b. Was yesterday a normal day for you in terms of what you ate? Were you tired, sluggish, energetic?**
- c. Were there any surprises in what you found to be the major nutrients that you got yesterday?**
- d. Where were you deficient? Where were you in surplus?**

Trainer asks group to come up with strategies to correct deficiencies and surpluses. Small groups report out to large group. Strategies are discussed. Those that are feasible are

encouraged by trainer to be acted on.

6. Trainer now asks small groups of trainees going to the same country to list what they know about foods and diets in their prospective Host Country. Also make a list of what they will need to ask in country. What dietary habits will they have to modify?

7. Trainer now talks about changes that they have agreed on for diet while in training and how this is a good place to start being aware of "good nutrition" and monitoring each other. Points out that good nutrition will help them stay energized throughout training.

Trainer's Note:

Trainees ate all meals together. Complained about lack of certain food stuffs and ways in which food was prepared. Trainers felt that trainees were not being sensitive to availability, and certainly not taking nutrition into consideration.

Session 10: The volunteer and technical assistance

Time: 7:30 AM to 9:30 AM

Goals:

- To examine some basic assumptions about Volunteers and technical assistance, and about living and working in a different system.**
- To identify and discuss special issues related to development assistance.**

Procedures:

Time	Activities
5	1. The trainer explains that this is a part of the RVDW component and, with the aid of a

Minutes	flow chart, reviews the different experiences and issues covered in the earlier RYDW sessions. The intent here is to "sketch" the larger picture of development and show how Volunteers are a part of that process. The introduction ends with the trainer reviewing the specific goals of the session (which have been listed on newsprint).
15 Minutes	2. The trainer asks participants to briefly review the article and choose one issue that they feel is relevant and significant.
20 Minutes	3. The following instructions are given by the trainer and self-monitoring is initiated:
	o Form triads, share and discuss individual issues. Choose one that is representative of the triad's interests.
30 Minutes	o Combine triads and form groups of 10-12. Share and discuss triad issues. Choose one issue to present creatively to the entire group. Each group also presents a flip chart with a statement of the triad issues.
5 Minutes	4. Break
8-10 Minutes	5. Group presentation per group
5 Minutes	6. The trainer presents the Peace Corps goals and links them to neo-colonialism and working as a Volunteer in development overseas.
	7. Ask the group to identify generalizations about neo-colonialism as it affects the PCV. Then ask the group to reflect on what they have learned and how this will be useful to them as PCVs.

Materials:

- **The Peace Corps Goals**
- **"Volunteers and Neo-Colonialism" handout**

- **Flip Charts, Magic Markers**

Trainer's Notes

- 1. While the participants are engaged in procedure #3, staff is encouraged to choose an issue and design a skit. Participants and staff are to present their issues in a fun and creative manner. Staff can offer to secure props for groups if needed.**
- 2. Participants should be encouraged to present their issue in skit form.**
- 3. Right after session 5 trainees should be given the "The Symptoms of Neo-Colonialism" and Long Term Service 1968 Articles to read.**

THE PEACE CORPS GOALS

The purpose of the Peace Corps is to promote world peace and friendship by making available, to interested countries and areas, men and women of the United States qualified for service abroad and willing to serve under conditions of hardship if necessary:

- 1. To help the peoples of such countries and areas in meeting their needs for trained manpower;**
- 2. To help promote a better understanding of the American people on the part of the peoples served; and**
- 3. To help promote a better understanding of other peoples on the part of the American people.**

LONG-TERM SERVICE 1968

A short review of volunteer service today, while revealing many young people usefully and

happily at work throughout the underdeveloped world, also reveals several disturbing features.

1. Volunteer service is becoming an Institution. Increased funds, salaries, allowances and better conditions, plus large numbers of "safe" assignments, usually government approved, all combine to provoke a new public image. Volunteer service abroad is now one of the standard alternatives after school or university, or as a break between jobs. The sense of risk, of solidarity, even of privilege at being a volunteer is vanishing.

A new type of administrator is also emerging, who has no desire to "romance over the past," and is more concerned to stabilize and integrate volunteer service into other Aid forms.

2. As volunteer service becomes institutionalized so numbers of good quality applicants for service are declining. The U.S. Peace Corps, for example, must settle in 1968 for a figure some 5,000 below Jack Hood Vaun's original target of 17,200. Sweden and Germany are experiencing similar difficulties on a lesser scale. One of the reasons, commonly accepted in America, is that young people no longer wish to be identified with their governments, in whom they have lost faith. This thesis is also taken up by Mr. Dieter Dankwortt in a paper prepared for the Council Learning and Helping Overseas and presented on March 21, 1968, in Bonn. In it he suggests that "The identification with the Bonn establishment puts the German volunteer Service in a difficult position. The young generation of a country can--as the example of the U.S. Peace Corps under President Kennedy showed--identify with the goals of its government, when these goals are dynamic and appeal to idealism. When the politically active part of the youth however, is disappointed with its government and seeks to maintain a distance from the establishment, it will then also refuse volunteer service financed and controlled by that government. This development is beginning in Germany..."

3. In the field, in contrast to the early years. there is now a tendency to cooperate with Technical Assistance, the Embassies, missions and even commercial interests. The volunteer programs profit, getting administrative help, advice, introductions, tools, materials and transport--all previously unavailable. In this affluent company, host country officials accredit volunteer programs with a new "maturity."

4. Volunteers are now being assigned responsibilities which are indistinguishable from those of regular Technical Assistance personnel, sometimes positions of considerable power. Mr. Dankwortt has this to say about the German volunteers, "Today both in giver and receiver countries, one can see a trend towards the replacement of the expert by the volunteer. What was intended as an addition has become a substitute. The reason for this trend lies in the fact that volunteers are carrying out similar or even higher ranking tasks than the experts. Only a few giver countries practice a consistent division of function and authority in their projects, and make it possible for experts and volunteers to work together in a cooperative spirit with an optimum division of labor."

All credit to those volunteers capable as, or even more expert than, the experts themselves. But let us remember that it is just at this pseudo-expert level that the rot has set in. Many of these volunteers filling "normal" posts are beginning to live at the standard traditionally expected of white expatriates. Equally, their field administrators live in conditions identical to those of Foreign Aid or Embassy officials. The host country ruling classes, who already enjoy or aspire to privileged conditions themselves--and top military and civil service officials, hotel proprietors, land owners and businessmen--naturally approve that "standards be maintained."

5. The improving of conditions within volunteer programs, far from strengthening the spirit of hard work, initiative, cooperation, concern --is undermining it. Mr. Dankwortt has this to say: "The perfect bureaucracy is the volunteer's greatest enemy. In all volunteer organizations which are structured on governmental administrative principles, there is a

marked trend towards the growth of a type of 'spoiled children' or 'small bureaucrats' who regard the organization as a kind of cow to be milked, and whose main worry during their period of service is to take maximum advantage of all financial and material subsidies available. The higher the subsidies, and the related maintenance standards and administrative costs, the lower the identification of the volunteers with the actual organization, and the weaker the individual initiative, assumption of risk and willingness to work hard. This trend is so strong that some organizations will need to make radical administrative and structural changes in the very near future."

In the end, except in name, a man may cease to be a volunteer at all. He becomes a mere "Contractor," one who undertakes to do certain work in return for payments and subsidies. He may consider himself underpaid--so, no doubt, does half the labor force of Europe--or he may have calculated that the "financial and material subsidies" he can claim are really quite considerable even by the standards of his home country.

Indeed, some organizations nowadays seem to be embarrassed to let the public know just how much the real income of their volunteers amounts to. In their information brochures and newspaper interviews, they write only of "broad, lodging, pocket money and local travel."

Many working men in industry take home less than this "pocket money" in their weekly pay-packets, though they do not know it.

6. The true international aspect of voluntary service has not developed; instead most governmental and even some non-governmental organizations have a distinct nationalist propaganda value. The "international understanding" spread by volunteers is, consciously or unconsciously, little more than a public relations campaign for their home country. Mr. Dankwortt has also noted in one of his theses that "...it would seem possible and desirable that a much stronger international cooperation be developed amongst the various

organizations."

Just how comprehensive Mr. Dankwortt wishes the word "international" to be, is not clear. What is sure, is that sending out "international" teams of Finns, Swedes and Norwegians or Americans, Canadians and English--as seems a possible future development on the volunteer scene--will not help much the cause of true internationalism.

I would describe each of these six conditions as disturbing since they all suggest that volunteer service is compromising itself before the conventional institutions. Many of these institutions, if not all, are bound to support neo-colonialism, although this idea might shock the majority of the people concerned.

How far volunteer service, through this compromise, is becoming an operating arm of neo-colonialism, can now shortly be described.

VOLUNTEERS AND NED-COLONIALISM

Early charges of neo-colonialism against volunteers, especially the American Peace Corps, were unfounded and often touched on the ridiculous. The men were denounced as C.I.A. agents; after secret military training (candidates rejected if they missed a nickel at 50 yards with a Colt revolver, according to one lurid pamphlet) they spied on their host countries and drew up plans for sabotage or military invasion. The role of the women was even less salutary. Later, more reasonable complaints arose: That many hundreds of jobs were being "found" or made up for volunteers, in countries suffering from vast unemployment. In most places, however, skilled local people probably did not exist.

As volunteers increased, providing teachers and medical personnel on a huge scale, completely staffing schools and hospitals in some countries and making up 20% 40% of secondary school staff in other lands, the complaint arose that unscrupulous states were

thereby able to avoid putting budget priority on such social services. They could keep down their expenses in public health and education and, in some cases, redirect the money saved to Defense--defense against their own citizens in the mountains. However, it is difficult to believe that the presence of volunteers could significantly affect budgets for external or internal defense. At least, no convincing statistics have come to my knowledge.] During the mid-sixties, it became clear that many European volunteers were still finding their way, via Embassy or ax-colonial channels, back to those countries with which closest colonial ties had existed. The distribution of British and French volunteers in Africa are given on page 38.

As for Belgium's 419 volunteers in 1967 (from a variety of non-governmental and official organizations), some 69% were assigned to the Congo, Kinshasa, Rwanda and Burundi. Even the Swedes' large program in Ethiopia was not without historical connections. And while the British and French were largely teaching their respective languages and consciously or unconsciously publicizing the British Way of Life and la culture francaise, their American colleagues, more variously employed, spread understanding for the United States in over sixty different lands.

The Americans thus often found themselves in countries hostile to the United States, a classic case being the Dominican Republic 1 at the time of the U.S. intervention. From countries like Ceylon, Guinea, Indonesia and Cyprus they were asked to leave.

In the early days, when the Peace Corps went to any place that would have them, many of their volunteers were very individualistic, open minded, articulate and critical of just three aspects of modern Western society which deserve criticism. Despite the source of their finances, one could not in all honesty charge them with being sinister reactionaries. For a while they were despised and disliked as much by their own US-AID personnel, who saw them as a threat to their positions, as they were by the Communist block and the Third World ruling elite.

However, as volunteer programs became entrenched in various countries, involving greater capital investment, larger administration, long term development plans, expert advisers--so the dangers of veritable neo-colonialism approached.

Eight Volunteers in the American Peace Corps, for example, noted this trend in Ecuador during the course of 1966-67 and produced a statement, part of which reads:

"We joined the Peace Corps because we thought it would afford us a means of helping developing nations without imposing the United States' political and cultural values on them. We assumed that the Peace Corps reflected the belief in a pluralistic world for which John Kennedy stood...the antithesis of the American colonialism that the rest of the world both fears and resents. We were wrong."

The eight went on to say:

"...the Peace Corps can never be a really effective organization for development if it is run unilaterally..."

since the Peace Corps rather than the host country decides which, projects should be undertaken and how. This results, they claimed, in

"volunteers determination to develop this country according to the formula which they assume made the United States great..."

without consideration for the culture into which they had intruded.

But the United States Peace Corps is too easy a target. With 12,000 volunteers in the field serving in almost every conceivable capacity from orchestral conductor to boxing coach, one can find examples of every kind of attitude, behavior, motive and philosophy.

TEN SYMPTOMS OF NED-COLONIALISM

- 1. Total integration into the official bilateral Aid program and dependence on this for policy, finance and professional administration --kills any chance of identity and independent action. Volunteers appointed as civil servants feel part of the official establishment and get no stimulus to develop unconventional attitudes. Careers are dangled before them like carrots to donkeys. Rules and regulations are the morality of the organization. "SIDA pays" is the motto.**
- 2. Publicity, training and service evaluation all emphasize the technical role of volunteers, while suggestions for moral, humanitarian, social role are received by SIDA with embarrassment, ridicule or silence.**
- 3. Many artisan volunteers are selected, because of their technical skills, who prove to be skeptical of the value of volunteerism and also prove politically immature. 1 (These were often assigned to work under Swedish Technical Assistance personnel, several of whom were also opposed to volunteers and who succeeded in undermining any last traces of self-confidence in the volunteer's motives.)**
- 4. Volunteers are increasingly appointed to jobs over Ethiopians, but seldom under or on an equal footing with Ethiopians. The result? "The volunteers very seldom described their relations with Ethiopians employed below them in terms of cooperation; rather, they explained things in terms of the character of the population as such," according to The Peace Corps Two First Years. 2**
- 5. One notes a marked reluctance to hand over responsibility to Ethiopians. The elementary school building project was a notorious example. Supposedly shared 50-50 with the Ministry of Education, with the twin aims of building schools and training Ethiopian engineers and workmen (who should eventually take over the project entirely), finance and leadership were kept tight in the hands of the Swedes. Rather than promote**

Ethiopian engineers to lead Regional building programs, after they had worked two years alongside Swedish volunteers who had such responsibilities, the SVS brought three new engineers down from Sweden, on experts' salaries.

To pleas to appoint an Ethiopian as field administrator of the general SVS program, SIDA replied that such a post could be filled by a European, not necessarily Swedish, but not by an Ethiopian. Ethiopians could rise to the level of administrative clerk, but no further.

6. Most volunteers find themselves assigned to production work rather than training, especially in the school building, auto mechanic and road building work. To a lesser extent this is also true of the medical work. Several volunteers protest that they are either cogs in the wheel on the one hand, or else promoted to managerial roles on the other--neither situation giving them time or encouragement to concentrate on training. Some training courses are arranged for foremen, but this activity falls far behind production in order of priority.

7. Volunteers enjoy a standard of living which, even by European standards is comfortable middle-class and by current African standards puts them in the same class as the ruling elite Although some volunteers, by the nature of their work, must rough it for periods of time, the majority (thirty-eight of forty-one according to the SIDA report)¹ have their own house, which they share with one or two colleagues, rent paid by the SVS. The SVS also pays for each house to have an Ethiopian sabanya (nightwatchman who often becomes the washer of floors, clothes and the volunteer's motor car, the fetcher of shopping and the late-night bottle of beer). In addition, most volunteers hire a mamita who cooks, washes dishes and often tidies the house and does some laundry. Cost to the volunteers, about 7 francs per month. According to the SIDA report ¹ only four out of forty-one volunteers interviewed did all their housework themselves.

Over the course of three years, volunteers moved their homes from the poorer quarters of

Addis Ababa, where the original group lived, to the fashionable Old Airport zone, the residential area for Embassy and Aid personnel.

In this zone, too, lies the Ethio-Swedish Building College, the spiritual center of the Swedish colony, with swimming pool, stables, landscape gardening and modern Scandinavian residences--protected by armed guards. Within this dreamland, the Swedish Volunteer Service set up its headquarters and there remained eighteen months. For a brief spell it moved to central Addis Ababa, but then transferred again to a large villa just vacated by the Cameroon Embassy.

But to return to the volunteers;

They receive 70 francs per month living allowance, of which about 50 francs in the field, plus 70 francs personal equipment allowance for two years, plus 200 francs worth of paid freight and travel allowance (Sweden-Ethiopia-Sweden, excluding the ticket), plus 70-90 francs for purchase of household furnishings, plus up to 25 francs per month rent, plus free water, electricity, gas, wood, decoration/repairs, medical care, insurance, in-service travel and hotel costs, some replacement work clothes, plus 2 francs per diem for any day (up to nineteen days, after which it is reduced by one-third) when service travel takes them more than 25 km. from their homes.

For comparison, it is worth noting that Ethiopian teachers, village level workers and public health dressers--so-called counterparts for many of the volunteers (at the same living standard as whom the Swedish volunteers are advertised as living) each earn about 30 to 60 francs per month, from which to pay all living costs, both for themselves and often for their families.

While Swedish Volunteers average Eth. \$100 each per month on house rent, the U.S. Peace Corps each average Eth. \$30, and the Ethiopian volunteers (EUS) Eth. \$10.

Such are the conditions of service in a country where, whatever the official statistics may show in terms of average income per head, a man can count himself lucky to be making Eth. \$100 or \$20 per month, the majority of people do not make half that much.

Of the sixty volunteers in 1967, eight owned private cars, four on a joint basis with another volunteer, and more than half of the remainder had direct access to project vehicles. Their private journeys could seldom be controlled.

8. Uncommitted Administration. Various Sections within the SIDA, dealing mainly with experts' problems of taxes, pensions, purchases, training and so on, also handle volunteers from time to time. Normally twice a year. Yet many of these regular SIDA employees in Stockholm and in Ethiopia are just doing development work as a job, as in any other Ministry. They are certainly not concerned with volunteers' attitudes. They can give no moral support because, basically, they do not accept the philosophy of equality which voluntary service implies.

Even the SVS full-time administrators are selected from within the SIDA corridors and have no previous experience of volunteers in action. Of course they are genuinely concerned to make the program successful, but they are committed first and foremost to the regulations of the system. They are career administrators, for better or worse. Last year they were assigned to Family Planning in India, say: this year they are instructed to run the Volunteer scheme; and if fortune smiles, and they make no major administrative blunder, they can expect promotion to Chief of Section before too long. Alternatively, they are building engineers, recruited from the profession at a regular market salary, again with no commitment to volunteerism and, on occasion with a definite opposition to the whole idea.

Having traveled to Ethiopia with family, first class; having moved into the luxury villas around the Old Airport or Building College; having hired "boys," "mamas" and other

servants to cook, wait at table and do other household chores: 1 with hunting guns in the cupboard and horses in the stable, tax-free car in the garage and a three franc per diem plus hotel expenses for each day's service duty outside Addis Ababa - they proceed to set the volunteers an example...

The charge is not that they are lazy. Many of them work quite hard and long and do efficient jobs from the administrative and technical point of view. But neo-colonialism is a measure of spirit, not energy.

9. Approval by the Ethiopian ruling elite. With the possible exception of point five above, the influential Ethiopians would find nothing objectionable about any of the ten points now being discussed. The Swedes are regularly praised for their way of living.

The basic reason is not hard to find. Ethiopia is an authoritarian and feudal country, where both the rich are expected to behave as rich and the poor to behave as poor. Social barriers are almost impenetrable. Policies, not politics, is the rule. The Ethiopians welcome foreigners who are concerned with techniques which serve the status quo--not with ideas and opinions which will cause local discontent. Foreigners who busy themselves building primary schools, which suit the Ministry of Education's plan and will never give more than the most rudimentary education, especially if these foreigners pay half the cost of the school themselves--these are desirable. Foreigners who make up 40%-50% of the core syllabus secondary teachers, and who do not teach by rote as did the Indian and Ethiopian teachers before them--they may be necessary just now, but they are dangerous. "They want to change things!" complained one Ethiopian official. Naturally, as one of the ruling Amhara tribe, he was not anxious for change.

10. The last tendency, which to my mind, reveals SIDA's Peace Corps as non-volunteer, is its refusal to establish an independent, antineo-colonialist philosophy. Neither volunteers nor staff share any common bond except their nationality and the SIDA administrative

rules. This causes a split throughout the program, since a few volunteers and staff felt that a common stand and identity is needed, whilst the remainder want to integrate--body, soul and bank-book--into the regular Technical Assistance.

Discussing this point with me in January, 1968, Mr. C. Strom--then responsible for in general the Peace Corps policies in Stockholm-emphasized that "a government cannot impose a philosophy on its personnel," as if it was this fear of anything beyond the civil service Rules and Regulations, which lay at the root of the dilemma. Yet nobody can force a person to volunteer to join an organization whose philosophy he rejects.

However, what Herr Strom was really saying was--you cannot expect us, organizers of a Foreign Aid program, to develop a volunteer service which will become a living criticism of our Establishment. It follows that no peace corps, sponsored and controlled by a rich-country government, can be other than neo-colonialist. It is against the present nature of things.

Session 11: Introduction to the cultural environment/Overview of field placements

Time: 2 PM - 3:30 PM

Goals:

- **To acquaint trainees with the new cultural environment they are living in**
- **To help trainees understand new environment and hopefully avoid some pitfalls**
- **Overview of Placements**

Overview:

During pilot testing of this Marine Fisheries program Sr Carlos Chardon of Technos Inc., a life long resident of Puerto Rico and an influential person in the southwestern area gave a

mini lecture about the culture of the Island. He also briefly discussed other items of interest. This session is important as it sets the stage for the up coming live-ins that trainees will be taking part in.

Materials:

- Map of Area, flip chart, markers, tape

Procedures:

Time	Activities	
1 Hour	1. Trainer or guest speaker briefly describe the following:	a. geography
		b. population
		c. agriculture
		d. fishing industry
		e. education
		f. political situation
		g. history
		h. cultural values
		i. forms of address

5 Minutes	2. Talk about local communities' preceptions of the trainees, nick names that have been given, etc.	
15 Minutes	3. Conduct a question and answer period.	
5 Minutes	4. Trainer now links this information to field placements.	
	5. Training director gives overview of live-ins, talks about various sites. Reminds trainees about the importance of recording this sessions/information in their journals.	
	6. Trainer announces that live-in assignments will be given day after tomorrow. Trainees will be asked to gather community data as well as technical data which they will use in subsequent session during technical training.	

Trainer's Notes:

If there is not a guest speaker available, trainers should be encouraged to follow similar procedures as outlined In Country Overview Session 2.

Session 12: Seamanship/personal floatation devices

Time: 7:30 AM to 9:30 AM

Goals:

- **To introduce the following:**
 - **Personal Flotation Device (PFC) Skills**
 - **Survival in Water**

- **Coast Guard Policy**
- **Peace Corps Policy Procedures**

Time	Activities
15 Minutes	1. Technical Trainer gives introduction to the life jacket (PFD). Procedure for proper wearing technique and floating techniques.
30 Minutes	2. Technical Trainer oversees and instructs in actual "in-water" application with full clothes and properly worn PFD. Body positions for personal safety/survival. Swimming techniques with PFD on.
20 Minutes	3. U.S. Coast Guard Policy for recreational and commercial fishing vessels is discussed by Technical Trainer. Technical Trainer emphasizes Peace Corps policy that all trainees will carry along a PFD while on any boat. Failure to do so gets you a ticket home. PFD's are to be taken on live-ins.

Materials:

- **1 PFD type #1 for each Peace Corps Trainee with all prescribed U.S. Coast Guard materials attached; flip charts, pens**

Trainer's Notes:

Utilized local fishing cooperative pier for each exercise.

References:

U.S. Coast Guard, American Red Cross Livesaving Manual

FEDERAL REGULATIONS REQUIRE PERSONAL FLOTATION DEVICES

Coast Guard regulations in Part 175 of Title 33, Code of Federal Regulations require personal flotation devices in the following three situations

(a) No person may use a recreational boat less than 16 feet in length or a canoe or kayak unless at least one personal flotation device (PFD) of the following types is on board for each person:

- (1) Type I PFD**
- (2) Type II PFD**
- (3) Type III PFD**
- (4) Type IV PFD**

(b) No person may use a recreational boat 16 feet or more in length, except a canoe or kayak, unless at least one personal flotation device of the following types is on board for each person:

- (1) Type I PFD**
- (2) Type II PFD**
- (3) Type III PFD**

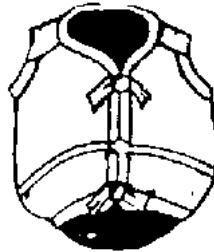
(c) No person may use a recreational boat 16 feet or more in length, except a canoe or kayak, unless at least one Type IV PFD is on board in addition to the PFD's required in paragraph (b).

THERE ARE FIVE TYPES OF PERSONAL FLOTATION DEVICES

This is a Type II PFD.

NOTE The following types of PFD's are designed to perform as described in calm water and when the wearer is not wearing any other flotation material (such as a wet-suit).

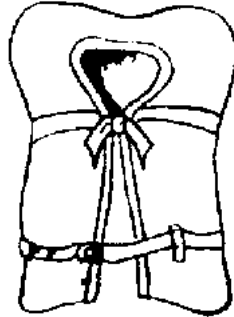
Type 1 - A Type I PFD has the greatest required buoyancy and is designed to turn most unconscious persons in the water from a face down position to a vertical and slightly backward position and to maintain the person in the vertical and slightly backward position. and therefore, greatly increase his or her chances of survival The Type I PFD is suitable for all waters, especially for cruising on waters where there is a probability of delayed rescue, such as large bodies of water where it is not likely that a significant number of boats will be in close proximity. This type PFD is the most effective of all the types in rough water. The Type I PFD is easiest to don in any emergency because it is reversible and available in only two sizes - Adult (90 lb. or more and child (less than 90 lb.) which are universal sizes "designed to fit all persons in the appropriate category).



Type I PFD

Type II--A type II PFD is designed to turn the wearer to a vertical and slightly backward position in the water. The turning action is not as pronounced as with a Type I and the device will not turn as many persons under the same conditions as the Type 1. The Type II PFD is usually more comfortable to wear than the Type 1. This type PFD is normally sized for ease of emergency donning and is available in the following sizes: Adult (more than 90 lb.) - Medium Child (50 lb. to 90 lb.) and two categories of Small Child (less than 50 lb or less than 30 lb.) Additionally, some models are sized by chest sizes. You may prefer to use the Type II where there is a probability of quick rescue such as areas where a is common

for other persons to be engaged in boating, fishing, and other water activities.



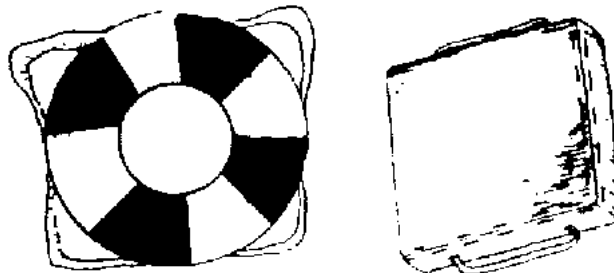
Type II PFD

Type III - The Type III PFD is designed so that the wearer can place himself or herself in a vertical and slightly backward position, and the device will maintain the wearer in that Position and hew no tendency to turn the wearer face down. A Type III can be the most comfortable, comes in a variety of styles which should be matched to the individual use, and is usually the best choice for water sports, such as skiing, hunting, fishing, canoeing, and kayaking. This type PFD normally comes in many chest sizes and weight ranges; however, some universal sizes are available. You may also prefer to use the Type III where there is a probability of quick rescue such as areas where it is common for other persons to be engaged in boating, fishing, and other water activities.



Type IV - A

Type IV - A Type IV PFD is designed to be grasped and held by the user until rescued as well as to be thrown to a person who has fallen overboard. While the Type IV is acceptable in place of a wearable device in certain instances, this type is suitable only where there is a probability of quick rescue such as areas where it is common for other persons to be engaged in boating, fishing, and other water activities. It is not recommended for nonswimmers and children.



Type V - A

Type V - A Type V PFD is a PFD approved for restricted use No Type V PFD is currently approved for use on recreational boats to meet the mandatory carriage requirements listed in paragraph (a), (b), or (c) above.

A. YOUR PERSONAL FLOTATION DEVICE

You are required by Federal Regulations to have at least one Coast Guard approved personal flotation device (PFD) for each person in your recreational boat. You may not use your recreational boat unless all your PFD's are in serviceable condition, are readily accessible, or legibly marked with the Coast Guard approval number, and are of an appropriate size (within the weight range and chest size marked on the PFD) for each person on board

B. WHY DO YOU NEED A PFD?

Your PFD provides buoyancy to help keep your head above the water and to help you remain in a satisfactory position in the water. The average weight of an adult is only 10 to 12 pounds in the water and the buoyancy provided by the PFD will support that weight in water. Unfortunately, your body weight does not determine how much you will weigh in water. In fact, your weight in water changes slightly throughout the day. There is no simple method of determining your weight in water. You should try the device in the water to make sure it supports your mouth out of the water. Remember. all straps, zippers, and tie tapes must be used and of course the PFD must be the proper size ;size limitations are on the label).

C. THINGS TO CONSIDER ABOUT PFD'S

(1) USCG approval of a PFD does not imply that it is ideal for all uses. For instance, there are a number of PFD's which are better suited for water skiing and others for white water canoeing and kayaking. These and other PFD's are labeled accordingly.

2) Some PFD's are more rugged and durable than others but usually cost more. You should evaluate the tradeoffs of cost, your intended use, and how often the PFD will have to be replaced.

(3) The use of most Type IV throwable PFD's usually requires you to grasp the device until rescued, which could prove difficult if there is an extended delay or if you are overcome by hypothermia (loss of body heat to the water). Also it implies that if you find yourself in the water there will be someone available to throw it to you.

D. EACH OF THESE DEVICES IS INTENDED TO HELP YOU SAVE YOUR OWN LIFE

For your PFD to function properly, follow these suggestions to insure that it fits, floats, and remains in good condition:

(1) Try your wearable PFD on and adjust it until it fits comfortably in and out of the water

(2) Try your PFD out in the water. This will show you how it works and will give you confidence when you use it. You should be aware that your PFD may perform differently under different conditions such as in swift water, with bulky clothing, etc.

(3) Mark your PFD with your name if you are the only wearer. (4) Do not alter your PFD. If it doesn't fit properly, get one that does. An altered device is no longer Coast Guard approved. (5) Your PFD is not intended for use as a fender or kneeling pad

(6) inspect your PFD periodically to ensure that it is free of rips, tears, or holes, that the flotation pads have no leaks, and that all seams and joints are securely sewn.

(7) Keep your PFD away from sharp objects which may rip the fabric or puncture the flotation pads.

(8) If your PFD contains kapok, the kapok fibers may become waterlogged and lose their buoyancy after the vinyl inserts are split or punctured. When the kapok becomes hard or if the kapok is soaked with water the PFD is no longer serviceable. It may not work when you need it and must be replaced.

(9) If your PFD is wet, allow it to dry thoroughly before storing it. Store it in a well ventilated area.

(10) Do not dry your PFD in front of a radiator or other source of direct heat.

(11) If you must swim while wearing PFD use a back or side stroke.

D. PFD'S AND CHILDREN

A child is difficult to float in a safe position because of the distribution of body weight and because a child tends to panic when suddenly in an unfamiliar environment. The violent movement of the arms and legs in an attempt to "climb out" of the water tends to nullify the stability of the PFD. An approved device will keep a child afloat, but not always in a face up position. A child should be taught how to put on the device and should be allowed to try it out in the water. It is important that the child feels comfortable and knows what the PFD is for and how it functions. Parents should note, however, that PFD's are not a substitute for adult supervision.

F. WEAR YOUR PFD

Your personal flotation device won't help you if you don't have it on. If you don't choose to wear it at all times, you should keep it handy and put it on when heavy weather threatens, or when danger is imminent. Don't wait until it is too late; nonswimmers and children especially should wear their PFD's at all times when on or near the water.

G. HYPOTHERMIA

Hypothermia, the loss of body heat to the water, is a major cause of deaths in boating accidents. Often the cause of death is listed as drowning; but, most often the primary cause is hypothermia and the secondary cause is drowning. After an individual has succumbed to hypothermia, he will lose consciousness and then drown. The following chart shows the effects of hypothermia:

Water temperature Exhaustion or (degrees unconsciousness Fahrenheit)	Expected Time of survival	
32.5	Under 15 min	Under 15 to 45 min.
32.5 to 40	15 to 30 min	30 to 90 min.
40 to 50	30 to 60 min	1 to 3 furs.
50 to 60	1 to 2 hrs	1 to 6 furs.
60 to 70	2 to 7 hrs	2 to 40 furs.
70 to 80	3 to 12 furs.	3 furs. to indefinite
Over 80	Indefinite	Indefinite

PFD's can increase survival time because of the insulation they provide. Naturally, the warmer the water, the less insulation one will require. When operating in cold water (below 40°F.) consideration should be given to using a coat or jacket style PFD as they cover more of the body than the vest style PFD's.

Some points to remember about hypothermia protection:

(1) While afloat in the water, do not attempt to swim unless it is to reach a nearby craft, fellow survivor, or a floating object on which you can lean or climb. Unnecessary swimming increases the rate of body heat loss. In cold water drownproofing methods that require putting your head in the water are not recommended. Keep your head out of the water. This will greatly lessen heat loss and increase your survival time.

(2) Keep a positive attitude about your survival and rescue.. This will improve your chances of extending your survival time until rescue. Your will-to-live does make a difference!

(3) If there is more than one person in the water, huddling is recommended while waiting to be rescued. This action tends to reduce the rate of heat loss and thus increase the survival time

(4) Always wear your PFD. It won't help you fight off the effects of hypothermia if you don't have it on when you go into the water.

H. REMEMBER - SAFE BOATING IS NO ACCIDENT

If you need more information about PFD's and safe recreational boating, contact your state boating authority, U.S. Coast Guard Auxiliary, U.S. Power Squadron, Red Cross, or your nearest unit of the U.S Coast Guard.

