





EXAMPLES of STRUCTURED OBSERVATION

The diagram below illustrates the way in which transects can focus attention on key issues affecting different areas in and around a community. In this case, this includes problems relating to existing aquaculture activities, but it also highlights other, perhaps more important, problems in surrounding areas

Such diagrammes can be drawn directly with local people referring to local landmarks and features, with discussion then systematically focusing on uses and problems.

TRANSECT of WAHARIA VILLAGE, IRIAN JAYA showing ACTIVITIES and PROBLEMS



Area	Area FOREST		LOWLAND FIELDS	PONDS	SETTLE MENT	MAIN ROAD Transport of produce • transport expensive		
Land-use collection Firewood collection Hunting Collection of wild leaves, roots V		Short-term crops • green • green • vegetables • legumes • root crops Livestock raising • pigs Wood storage	Long-term crops • cocoa • fruit trees • coconuts	Trials of catfish culture	Housing Long-term crops Brick-making			
		livestock disease	land-use patterns decided by original landowners (suku Wate)	theft lack of advice from fisheries extension service no additional feed	limited extension support			

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Source: Townsley 1996

FIGURE 7 FIGURE 5 SEASONAL DAILY ACTIVITY CHARTS for MEN and WOMEN, RANKING of PREFERENCES for DIFFERENT FISH SPECIES: DZINAVENE VILLAGE, ZIMBABWE (1991) MWENJE DAM, ZIMBABWE (1991) firewood// cooking 12.00 WOMEN RANKING CRITERIA Winter breakfast Summer No religious Taste Not bony Good size wet season prescription dry season FISH TYPE housework in fields firewood work gardening in fields 2 3 =1 Sinde firewood 1800 6.00 (barbus) 2 =1 Magwaya sleep sleep (bream) 3 3 3 Mhahle (barble) breakfast & 24.00 12.00 MEN breakfast 12.00 FIGURE 6 work odd jobs/ SEASONAL CALENDAR showing availability of in fields field FISH, VEGETABLES and WILD FOODS (insects and grubs) in fields preparation 1800 TARU DAM, ZIMBABWE (1991) 1800 6,00 6.00 drinking rest Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec sleep sleep RAINFALL 24.00 24.00 FIGURE 8 FISH AVAILABILITY TIMELINE illustrating HISTORICAL CHANGES at TARU DAM, ZIMBABWE (1991) DROUGHT DROUGHT VEGETABLE AVAILABILITY 190 51 152 153 154 155 , 190 181 182 183 184 185 186 187 188 189 190 191 silt-traps irrigation irrigition Taru Takunda dam filled pipe installed Garden Coop started & stocked construction broken WILD FOOD SOURCES (FFW) formed started school vegetable Mazondo siltation noticed -Mukamori garden started Garden Coop Garden Coop construction dam almost dry formed completed formed 15 Source: Townsley 1996 14

EXAMPLES of RANKING

A very simple ranking matrix was shown in the case study in Chapter 2. The two ranking exercises shown below are more complex. The first matrix shows how a ranking exercise could be used to distinguish the relative involvement of different social and occupational groups in exploiting different fisheries resources; including fish ponds, in a floodplain area. Here some easily available materials, such as stones or beans, are being used to express the proportions of a particular resource used by different social groups - men and women, adults, children and old people, and different occupational groups based on those identified by local people as being involved in fishing.

In ranking exercises of this kind care has to be taken that it is clear what is being ranked - in this case relative proportion of overall resource use. RRA teams also have to make sure that they have thought through the numbers of "counters" used in each category. In this case, 10 stones have been given for each comparative group - i.e. men and women using pond fisheries - so that the result can readily be expressed as a simple proportion. But clearly this does not tell us which of the various resource categories is most important for each user group. Ranking could also be attempted vertically to clarify the relative importance of the resources. This would help in trying to assess the current importance of pond use for fisheries relative to other sources of fish.

Resource users Fishing areas	Men	Women	Adults	Children	Old People	Farmers	Fishers	Traders	
PONDS	000	0		•	۰	a a	: .		- THE
BORROW-PITS	e**	000	• *		0 0		0 0		
STREAMS in VILLAGE	0 0	0 0	0 0	a a	0 0	000	000		
near FLOODPLAIN	000		0 0	000	0	000	0	9	
far FLOODPLAIN	20 20		000	0		9 9	000	0	
perennial SWAMP	000		000	,		900	0 0		
RIVER	200		0 0	0 0		00	0 0		

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Source: Townsley 1996

In the second matrix, the focus is on changes over time. In this case, the team doing an RRA about current aquaculture development in a particular area might want to see how sources of fish in a local market have changed so that the relative importance of aquaculture can be assessed. A fish dealer, or group of fish dealers, might be asked to show, again using stones or some other kind of counters, the relative amounts of fish bought from different sources now and in the past. This could be combined with a discussion of changes in the species composition of fish sold. The time periods used could be chosen by the team or, better still, be based on prior discussion with local people which had identified events or periods which people readily recognised based on political, economic or resource changes.

CHANGES in FISH TRADERS' SOURCES of FISH and SPECIES SOLD: pre-1980 to present

Sources of fish for sale	Pre-hatchery construction (pre-1980)	Pre-road construction (1980-1981	Post-road construction (post-1991)
Bought from fishers	00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 00 0	a a a
Bought from other dealers	0 0	0 0 0	0 0
Bought from fish pond owners		2 2 2 2	00000
Bought from farmers (from paddy fields)		e e	0 0 0 0
Bought from farmers (from borrow-pits/ submersible ponds)	·	0 0	0 0 0
Large carps (wild)s	4 A A A	9 80 9	0 00
Small floodplain fish	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		00000
arge carps (cultured)s		* * * *	0 0
Exotic carps (cultured)		0 0	9 99 9 9 9 9
Tilapia (cultured)			, ,

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Source: Townsley 1996

Who are the other stakeholders?

POOR PEOPLE ADVOCATES FOR THE POOR NGO FISH FARM MANAGERS -VECETABLE PRODUCERS FARM MANACERS RICE PRODUCERS ANIMAL PRODUCERS Paurans DEPT OF IRRIGATION + WATERWAYS CMC - MONITOR WHOLE LAND PRESOURCE SAZMASI WILDLIFE STAKEHOLDERS POLLUTION CONTROL BOARD COUNTRY LIQUER PRODUCERS TANNERY OPERATORS + OTHER DEPT OF FISHERIES ACHUMES POLICE DEPT OF ENVIRONMENT. POACHERS CONSUMERS KOCKATA CITY CMBISA CHWSA BANKERS + MONEY LENDERS WHOLESAUF MARKES / MARKET OWNER / RETAIL VENOUR PEOPLE IN PLOOD PRONE AREAS PROSESSORS SEED TRADERS TAX PAYERS PEVELOPERS - WBIDC SCHENTISTS

		cutta Wetlands			
Name:			 		*****
Preferred sources o	f infor	mation:			
Newspaper articles		Book	Technical report		
Journal articles		Audio-tape	Radio broadcast	_	
Journal articles		Audio-tape	Radio bioaucasi	_	
Film/video		Pamphlet	CD Rom/DVD		
Website	□.	Field manual	Policy briefings		
Other					
