Module 2: Baseline Assessment

SESSION 17: ANALYSING BASELINE INFORMATION

HANDOUT 3 – ANSWERS TO CROSS CHECKING EXERCISES

1. Income and expenditure cross checks

The boxes to the right (below) indicate four possible cross checks that can be done on this data. The Baseline Storage Sheet does the calculations and displays the results shown automatically. This means that normally this sort of cross checking involves checking, rather than calculating, these figures.

1	TITLE OF ASSESSMENT	Dry Middleveld			
2		SUMMARY			
3	WEALTH GROUP	BASELINE			
4	Region	Very Poor	Poor	Midd-le	B/Off
5	Chiefdom				
10	**Food: total (%)**	100%	103%	117%	120%
11	crops	27%	27%	38%	59%
12	livestock products	0%	0%	8%	10%
13	payment in kind	10%	12%	0%	0%
14	purchase	28%	30%	61%	47%
15	food aid	22%	22%	0%	0%
16	gifts, other	13%	12%	11%	5%
17	**Income: total (maloti pa)**	2880	5818	15607	42950
18	crop sales	0	78	627	850
19	livestock product sales	0	0	0	0
20	livestock sales	0	2300	5600	5200
21	employment (e.g. labour) +	1160	1050	6740	33300
22	self-employment (e.g. brewing)	1320	1590	1200	0
23	petty trade	400	800	1440	3600
24	other	0	0	0	0
25	**Expenditure: total (maloti pa)**	2856	5804	15330	41596
26	staple food	663	899	2646	1434
27	non-staple food	444	794	1626	5352
28	HH items	454	596	1538	2710
29	water	0	0	0	0
30	inputs	120	425	2350	4000
31	social serv.	660	1520	2900	8000
32	clothes	150	250	650	1500
33	transport	150	300	600	3000
34	beer and tobacco	50	150	400	2600
35	other	165	870	2620	13000
36	staple/total income	23%	15%	17%	3%
37	income minus expenditure	25	14	277	1354
38	**Wealth characteristics**				
39	% of households	13%	40%	30%	17%
40	HH size	6	8	8	6

a / b / Wealth breakdown / Methods /

Food income should be at least 90% of kilojoule requirements.

Cash income should increase with wealth group.

Money spent on staple food as proportion of total income or expenditure should decrease with wealth group.

Total income should be roughly the same as total expenditure.

2. Labour cross check (i)

Summary: You need to find out how many households the casual work offered by coffee pulping stations could support, and calculate what proportion of total households in the zone this represents.

- **How many people in total are employed by pulping stations?**
  79 stations x 85 workers = ≈ 6,700 workers

- **How many households would this support?**
  Total population in the coffee livelihood zone = ≈ 182,000
  Total number of households (assuming av. hh of 7) = ≈ 26,000

- **What proportion of households could have a member doing casual work at a pulping station?**
  6,700 ÷ 26 26,000 = ≈ 26%

- **So can most very poor and poor households obtain income from this source?**
  It is quite possible for all very poor households (15% of all households) to have a member doing this kind of casual work. Some poor households (25% of all households) could also have men doing this work.

3. Labour cross check (ii)

The cross check calculations are shown in bold in the shaded rows below:

Labour cross check				
Wealth group	***Very poor***	***Poor***	***Middle***	***Better off***
Number of households	15	25	40	20
Labour status	Work	Work	Employ	Employ
Birr earned or spent per household	560	370	100	600
Total amount earned or spent by wealth group	15 x 560 = **8,400**	25 x 370 = **9,250**	40 x 100 = **4,000**	20 x 600 = **12,000**
Total earned	8,400 + 9,250 = **17,650**			
Total spent	4,000 + 12,000 = **16,000**			

Thus, the total amount earned by the poor and very poor is roughly consistent with the total amount spent by the middle and better-off.

4. Land rental cross check

Summary: To check that the land rented out and the land rented in balance, you need to check that the total area of land owned by all households is roughly the same as the total area of land cultivated by all households.

- **What is the total area of land owned by all households?**
  (50 poor households x 3.5) + (30 middle households x 4) + (20 better off households x 4) = 175 + 120 + 80
  = **375 *timads***

- **What is the total area of land cultivated by all households?**
  (50 poor households x 1) + (30 middle households x 6) + 20 better off households x 7.5)
  = 50 + 180 + 150
  = 380 *timads*

Conclusion: The total amount of land owned (375 *timads*) and the total amount of land cultivated (380 *timads*) balance.

5. Crop production cross check: sweet potatoes

Using the figures in the table, it is possible to calculate sweet potato production per household for each wealth group. Production can be calculated in two steps:

(i) **Calculate timads planted with sweet potatoes**:
- total cultivated area (*timads*) x % land cultivated with sweet potatoes

(ii) **Calculate sweet potato production:**
- area planted with sweet potato (*timads*) x yield (kg/*timad*)

These calculations are shown in the shaded rows below.

Sweet potato production				
Wealth group	***Very poor***	***Poor***	***Middle***	***Better off***
Total area cultivated (timads)	0.75	1.25	2.25	4.5
Est. % land planted with sweet potatoes	30%	30%	20%	10%
Area planted with sweet potatoes (timads)	0.75 x 0.3 = **0.225**	1.25 x 0.3 = **0.375**	2.25 x 0.2 = **0.45**	4.5 x 0.1 = **0.45**
Sweet potato production (kg)	0.225 x 1,750 = **394**	0.375 x 1,750 = **656**	0.45 x 1,750 = **788**	0.45 x 1,750 = **788**

Sweet potato yield = 1,750 kg per timad (all wealth groups)

These figures can then be compared with household production data obtained in interviews with household representatives.

6. Crop production cross check: coffee

Using the figures in the table, it is possible to calculate the cash income obtained from coffee production for households in each wealth group. This can be done in two steps:

(i) **Calculate coffee produced**:
- Number of bushes x yield per bush (kg per bush)

(ii) **Calculate income obtained from coffee produced**:
- Coffee produced (kg) x coffee price (birr per kg)

These calculations are shown in the shaded cells below.

Coffee production (dry processed)				
Wealth group	***Very poor***	***Poor***	***Middle***	***Better off***
Number of bushes	12.5	25	50	90
Yield per bush (kg)	0.9	1.0	1.1	1.2
Coffee produced (kg)	12.5 x 0.9 = **11.25**	25 x 1.0 = **25**	50 x 1.1 = **55**	90 x 1.2 = **108**
Cash income (birr)	11.25 x 4.5 = **51**	25 x 4.5 = **113**	55 x 4.5 = **248**	108 x 4.5 = **486**

These figures showing the cash earned from coffee production can then be compared to those obtained in interviews with household representatives.