HOMESTEAD FORESTRY AND RURAL DEVELOPMENT: A SOCIO-EMPIRICAL STUDY OF BANGLADESH

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ONE- WAY ANALYSIS OF VARIANCE FOR SAMPLE POPULATIONS

Independent variable is the Household where, 1=Rich; 2=Middle
and 3= Poor. Degree of freedom (DF) *= 2, 117; **=3, 117; ***=2, 116 and
****=3, 116. At 95% level of confidence.

Dependent variable	DF	F Calculated	F Critical	Prob.	Hypothesis accepted (A) or rejected (R)
Sources of cooking fuel					
Leaves	*	9.222	3.07	.000	R
Crop residues	*	12.1793	3.07	.0000	"
Wood	*	25.427	3.07	.0000	"
Twigs	*	1.0530	3.07	.3522	A
Straw	*	3.0898	3.07	.0492[1]	"
Bamboo leaves	*	.8874	3.07	.4145	"
Cow dung	*	1.8927	3.07	.1552	"
Kerosene	*	3.2828	3.07	.0410[2]	"
Electric power	*	1.7171	3.07	.1841	"
Collection of fuel					
Collection of fuel by female adults	*	7.6363	3.07	.0000	R
Collection of fuel by hired labourers	*	30.6904	3.07	.0008	R
Collection of fuel by male children	*	.6233	3.07	.5379	A
Collection of fuel by male adults	*	3.0813	3.07	.0496	"

Collection of fuel by servants	*	11.27 26	3.07	.0000	R
Consequences of fuel scarcity					
Reduced cooking time	*	37.79 73	3.07	.0000	R
Eat uncooked food	*	26.77 5	3.07	.0000	"
Collect fuel from other than homestead forest sources	*	41.40 58	3.07	.0000	"
Fruit resources					
Fruit as staple food	*	10.24 82	3.07	.0001	R
Annual income from fruit	**	4.387 3	2.68	.0026	"
Ownership of fruit resources	**	5.041 1	2.68	.0026	"
Employment for village people from fruit	**	6.228 3	2.68	.0006	"
Employment for other than village people from fruit	**	5.886 5	2.68	.0009	"
Homestead forest fodder					
Fodder used as animal feed	*	7.053 1	3.07	.0013	R
Fodder sold at local market	*	6.499 3	3.07	.0021	"
Collection of fodder by female adults	*	3.493 5	3.07	.0336	"
Plant medicine	*				
Plant medicine used for treatment of burning	*	4.490 2	3.07	.0132	"
Plant medicine used for treatment of skin diseases	*	3.509 2	3.07	.0331	"

3

Plant medicine used for sexual diseases	*	1.5159	3.07	.2239	A
Contingency expenditure from homestead forest sources					
Purchase of fertilizers, seeds etc.	*	6.1484	3.07	.0029	R
Buying of food and daily essentials	*	11.0842	3.07	.0000	"
Credit repayments	*	9.4444	3.07	.0002	"
Educational expenditure	*	5.5348	3.07	.0050	"
Medical treatment	*	7.5271	3.07	.0002	"
Purchase of land	*	6.9167	3.07	.0002	"
Consequence of natural disasters					
Famine experienced during natural disasters	*	7.6322	3.07	.0008	R
Coping strategy during disasters					
Spent past savings	*	4.1681	3.07	.0078	R
Consumed forest food	*	23.0331	3.07	.0000	"
Sold livestock	***	5.9029	2.68	.0036	"
Sold trees/tree products	****	5.5774	2.68	.0049	"
Borrowed money	*	12.0586	3.68	.0000	"

1.   Although this value apparently indicates that the mean differences are significant, the computer software used in this estimates indicates unreliability of the numerical values. For straws, the use is not as small. Nevertheless, its role as a fuel is less significant than some other items such as leaves, crop residues and wood. The observed differences in the mean values therefore are not easy to interpret in quite the same way as those for more important fuel items.

2.   In the case of kerosene, the reason for this apparent anomaly could be the very limited use of this material as a fuel. The observed differences in the means, therefore, are not very meaningful in the context of its use.

SUPPLEMENT TO THE THESIS

AN INFERENTIAL TEST OF THE FINDINGS ON SAMPLE MEANS

One of the techniques with which the statistical test can be applied is the ONE WAY analysis of variance which has been used as a tool in analysing our sample populations.

The analysis of variance is one of the most powerful tools at the disposal of both natural and social researchers. Essentially, the analysis of variance is a technique that separates the variation that is present into independent sample populations; then these sample populations are analyzed in order to test certain hypotheses.

The hypothesis that is tested by means of the ONE WAY analysis of variance technique is whether the means of several populations are equal. The technique examines the variability of the observations within each group as well as the variability between the group means. Based on the two estimates of variability, the ONE WAY analysis of variance allow us to draw conclusions about differences between the group means.

There are two different analysis-of-variance procedures: the ANOVA and the ONE WAY procedure. In the ANOVA, the assumption must be made that: i) we have random samples from normal distributions; and ii) the normal populations all have equal variances. In the ONE WAY analysis, one variable is used to classify cases into different groups. Normally, the ONE WAY procedure is used when the sample population groups are independent. For various reasons, there are many situations in which the sizes of samples are not equal. One sample might have ten observations, another five, and yet another thirteen, for example. In this situation, ONE WAY analysis is the most appropriate tool to classify cases into different groups.

In analysing our sample survey data, we have used the ONE WAY technique because our sample populations have different groups, and they are not equal in size. For example, we have three different groups within sample populations, and each group is independent and has

different size sample populations. This is why we have used the ONE WAY analysis-of-variance test. In this analysis, the observed variability in the sample is divided, or partitioned, into two parts: variability of the observations within a group (that is, the variability of the observations around their group mean) and the variability among the group means.

The null hypothesis for the with-in sample analysis of variance is that the means of the three groups within the samples are equal. For the between-sample analysis of variance, the null hypothesis is that the means of the samples are equal.

If the null hypothesis is rejected, then the difference in the means of the groups within the samples are 'significant'. This would imply that the observed differences are due to the characteristics of independent variables which, in our case, are the households (rich, middle or poor).

THE EXPLANATION OF THE INFERENTIAL TEST RESULTS

The supplementary Table 1 presents the relevant statistical information relating to the analysis of variance performed on the group means within the samples; the groups in question being the three household types: rich, middle and poor; while the sample consists of the respondents from all four villages.

The analysis is performed for each of the nine principal dependent variables in terms of their constituent sub-variables. The independent variables are the three types of households.

Taking the first sources of cooking fuel as the dependent variable, the findings show that out of the nine sources of cooking fuel only three - leaves, crop residues and wood - display statistically significant differences, while the means of the other six are not significantly different.

Out of the three items for which the differences are significant, the poor rely more on leaves because they lack alternative fuel sources and cannot afford to use those that are available from homestead forest trees and crops. Their use of leaves is therefore high, while the rich and middle households would consider leaves an inferior fuel because these households' can afford other items of fuel which are of better quality.

For crop residues and wood, the reason for the difference relates to the ownership by the rich and the middle households, of more cultivable land and useable trees in homestead forests both of which the poor households do not own in significant quantities.

The use of kerosene and electricity is, in general, very limited because of their scarcity in the rural areas. So, regardless of the economic status, their use patterns are virtually the same.

The remaining four fuel sources are all insignificant because of either their nature or their alternative uses. For example, twigs, straw and bamboo leaves are not abundant in relation to the fuel needs in the villages; while cow dung has a more important use as manure. As

has been detailed in the main text of the study, leaves, crop residues and wood provide most of the cooking fuel used in the villages. Our findings here are therefore in line with the observed use patterns.

Turning to the collection of fuel, the Table shows five different groups of collectors of fuel. Out of these, significant differences are observed in respect of three groups: female adults, hired labourers and servants; while there are no significant differences in respect of male children or male adults as collectors of fuel. Both male children and male adults are likely to be engaged in more arduous tasks such as day labouring or farming. Their role as fuel collectors therefore is insignificant regardless of their economic status. But, while the categories female adults, hired labourers and servants engage in fuel collection to a greater degree in general, there must be differences among households of different status. The rich and the middle households would be expected to engage servants and hired labourers to a greater extent than would the poor. Also, the participation of the male members themselves would differ significantly in accordance with their economic status - the poor participating more than the other two categories.

The next dependent variable concerns the consequences of fuel scarcity. All three consequences, namely, reduced cooking time, eating uncooked food and using other fuel display significant differences. Again, the nature of these variables implies that the economic status of the households must be a dominant factor. The poor would face the consequences of fuel scarcity to a much greater degree than the rich, while the middle income households would also escape the most drastic consequences - such as reducing the cooking time and using more uncooked food. The use of fuel from non-homestead-forest sources - is obviously determined by the access to such sources. Again, the access of the poor would be very limited. The estimated differences thus make sense from a sociological viewpoint.

The next variable is fruit resources and their uses. There are five different uses reported in the Table and, in all five cases, the differences are found to be significant. The explanation in all cases would appear to be related to the economic status of the households. Thus, the use of fruit as a staple food, a generator of income, as also its overall ownership, and its role

as a provider of employment to people within the villages and outside, must be dependent on the ownership of homestead land on which the fruit trees are planted. Given the extremely uneven distribution of such land in the villages, the ownership of the trees is also very uneven. Another reason is that the poor are much more likely to act as small fruit traders because of the need to supplement their incomes; while the middle and the rich income households would have little need to sell fruit. Hence the observed differences in the means with respect to the variables.

Turning to the dependent variable homestead forest fodder, three items are reported - all with significant differences in their means. First, fodder used as animal feed and fodder sold at local markets both must depend on the ownership of animals and the ownership of homestead forests, and both are likely to be related significantly to the economic status of the village households. The third item, collection of fodder by female adults, is substantially to be found among the poorer households. These households may own some animals, perhaps a goat or even a cow, but would not have their own source of fodder from homestead forests. Hence, their female members would engage in collecting such fodder. The rich and the middle income households, on the other hand, would not only have better access to such fodder but would also have other sources of fodder. These later households would also be able to hire the services of non-family members for collecting such fodder, if necessary. The observed mean differences therefore are significant, as is to be expected.

The next dependent variable is plant medicine and its uses. In two out of the three reported uses, the means are found to be significantly different while, in the third, it is not. For treatment of burn and skin diseases, the mean differences have been found to be significant. The incidence of both these ailments is likely to be different amongst villagers of different economic status. The less well-off are likely to expose themselves to more risky situations with regard to the use of cooking or heating fuel than the rich. Skin diseases too are related to either nutritional deficiencies or lack of personal hygiene. In both cases, the poorer households are likely to be the worse sufferers. Hence, their use of plant medicine - often

their only source of medication for treatment in these cases - is found to be higher. For treatment of sexual diseases, the better off would most probably use modern medicine while the poor must still rely on plants. The differences might therefore have been significant, but information on the incidence of such diseases might not be as accurate as those in other areas. Hence, it is perhaps best to take the results in this area with a degree of scepticism. Several other findings on the uses of plant medicines reported in the main study could not be analyzed statistically in a satisfactory manner. Nevertheless, these findings which are reported in simpler arithmetical terms in the thesis are important, and should be studied in conjunction with the present supplement.

Turning to the next dependent variable, contingency expenditure from homestead forest sources, six different uses are identified, all with a significant mean difference. The nature of these uses, again, is such that the different households would use homestead forest resources differently because of either the differences in their access to such sources or the availability of other sources. The items are not gone into separately because their very nature would suggest that the statement made above is self explanatory.

The next variable concerns the consequence of natural disasters. Only one consequence, famine, is reported in the Table, with a significant mean difference. A natural disaster almost always causes widespread food shortages. Households with access to homestead forests are likely to cope better in such circumstances than households with less homestead forests. Hence, the observed difference is in line with the economic reality of Bangladeshi village life. There are other consequences of natural disasters too. These findings in regard to them are, again, reported in the main study. These findings do not lend themselves to statistical testing in the way that famine is tested here, for example. The qualitative and multiple-response findings reported in the main text are, of course valuable, and should therefore be studied together with the results reported here.

Finally, the variable called coping strategy during disasters, has five items listed in the Table. Two of these five are homestead forestry related. These two are the consumption of forest

food and the selling of trees or tree products. The mean differences in respect of both of these items are significant which reflect the fact of ownership of homestead forests by households. The poor own less homestead forest resources and, therefore, can rely less on food from this source than can the rich and the middle households. However, to the extent that the poor owned a few trees, their need to sell them would be much greater during a disaster than the needs of the better off households who could fall back on other resources. Hence, the observed differences make sense.

In interpreting the results detailed in supplementary Table 1, it must be emphasised that the sample they are based on are not entirely random. Out of the three groups of households on whom information was collected, only one - the poor-were selected randomly; the other two, the rich and the middle, were so few in number in all villages that their entire populations were included in the study. The samples therefore are 'mixed' ones, and not, strictly, useable in an inferential way. Also, in a sociological study, such as the present one, qualitative results based on the participation-observation-method, for example, are also very important. These findings have been reported and analyzed at length in the main study.

It is emphasised that the present supplementary study must be considered in conjunction with the findings of the main study. Together, they provide a full and more meaningful picture of the issues involved, and the extent to which the results are generalisable.

SUPPLEMENTARY TABLE 2

Sample Survey Questionnaire* on Homestead Forestry, 1992.
HOUSEHOLD INFORMATION

SL. NO.	VARIABLE LABELS**	VALUE CODE LABELS**	CARD NO	COL-UMN NO.
1.	Card No.	01 card 1	01	1-2
2.	Family No.	Exact value		3-5
3.	Date of interview	Exact date		
4.	Name of the village	1=vill 1 2=vill 2 3=vill 3 4=vill 4		6
3.	Name of household Head	Exact name		
5.	Family size	Actual size		7-8
6.	Family Type	1=Nuclear 2=Joint 3=Extended		9
7.	Sex of head of household (HH)	1=Male 2=Female		10
8.	Marital status of HH	1=Unmarried 2=Married 3=Widowed 4=Widow 5=Divorced 6=Separated 7=Remarried 8=Others		11
9.	Age of HH	Actual age		12-13
10.	Religion of HH	1=Muslim 2=Hindu 3=Christian 4=Buddhist 5=Others		
11.	Education of HH	Total Years 99=Illiterate		15-16

12.	Main occupation of HH	Actual Occupation with 1-24 value code and 00=NA		17-18
13.	Secondary Occupation of HH	Same as value code of 12		19-20
14.	Homestead land	Actual (in hectares)		21-23
15.	Other than homestead land	Different types of land with 1-11 value code		24-27 54-55
16.	Using as homestead land	Actual years		56-57
17.	First settler on this homestead land	Name of the generation with value code 1-9		58
18.	Previous land pattern of this homestead	Actual pattern with value code 1-7		59
19.	Annual income (all sources)	Actual income in thousand *taka*		60-61 70-71
20.	Assets other than land	All items		72..80
21.	No. of livestock	Actual nos.	02	1-2... 10
22.	Structure materials of main house (roof)	Actual structure with value code 1-19		11
23.	Wall materials of main house	Actual materials with value code 1-6		12
24.	Sources of raw materials for house building	All sources with value code 1-4		13
25.	If own sources, what are those sources	All sources with value code 1-3 & 9		14
26.	Is their any boundary around your homestead?	1=yes; 2=no		15
27.	if yes, what are the materials?	Actual material with value code 1-9		16
28.	Sources of boundary materials	All source with value code 1-9		17

29.	Total houses within the homestead	Actual nos.		18
30.	Sources of drinking water	All sources with value code 1-5		19
31.	Sources of cleaning/washing water	"		20
32.	Do you have toilet facilities?	1=yes; 2=no		21
33.	If yes, what kind of toilet?	Actual structure with value code 1-3 & 9		22
34.	No. of dependents in the household	Actual nos.		23-24
35.	Information about other members of the households (age, sex, main and secondary occupation, relationship with head of household, marital status)	Sex: 1=male; 2=female; actual age, actual occupation & marital status;actual relationships with head of household with value code 1-9	02 & 03	25 26-27 28-29 30 31 54
36.	Do you have any trees/plants/bamboo within your homestead?	1=yes 2=no	03	55
37.	If yes, pl. provide detailed information about trees /plants /bamboo (species; mature /pre-mature /growing; total nos., approximate value both for timber and fruit)	56-58 59-61 62-64 65-67 68-70 71-75 76-80	03 ... 15	56-80
38.	Is there any space for planting more tree?	1=yes 2=no	16	6
39.	If yes, how many?	Actual nos.		7-9
40.	How many trees and bamboo have you cut down since independence of 1971?	Actual nos.		10-11
41.	Did you cut down more trees/bamboo during the Pakistani period?	1=yes 2=no		12

42.	If no, what were the reasons?	All reasons with variable labels a-d		13... 16
43.	Reasons for cutting trees/bamboo since independence of 1971	All reasons with variable labels a-e		17... 21
44.	Did you plant more trees/bamboo to balance the situation?	1=yes 2=no		22
45.	If yes, how many trees/bamboo have you planted?	Actual nos. with the value code 1, 2 & 9		23
46.	Who plant trees on your homestead? rank in order of highest nos. of planting	Actual nos. with value code 1-9		24-26
47.	What are the sources of seeds /seedlings /saplings?	Actual sources with value code 1-9		27-29
48.	How do you take care of trees/plants?	Actual measures with value code 1-9		30-32
49.	What kind of measures do you take for protecting saplings/plants and young trees?	All measures		33-34
50.	Who looks after the trees/plants?	All participants with value code 1-9		35-37
51.	Do you find any differential role of household members in planting and managing trees?	1=yes 2=no		38
52.	If yes, pl. explain the situation	Actual role with value code 1-9		39-40
53.	Was there any differential role of the household members in planting and managing trees during Pakistani and Bangladeshi period?	Actual role with value code 1-9		41-42 43-44

54.	Who share the benefits of trees/ plants /bamboo?	Actual beneficiaries with value code 1-4		45
55.	Does any household member get preferential treatment from the share distribution?	1=yes 2=no		46
56.	If yes, who?	Household member with value code 1-3 & 9		47
57.	Pl. state which items are used as fuel for domestic cooking?	All items mentioned with variable labels a-i		48-49 64-65
58.	What are the sources of cooking fuel?	All sources mentioned with value code 1-9		66-67
59.	What were the items of cooking fuel during Pakistani/British period?	All items mentioned with value code 1-9		68-70
60.	What were the sources of fuel during that time	All sources mentioned with value code 0-5		71-72
61.	Did you face any fuel scarcity during Pakistani/British period?	1=yes 2=no		73
62.	If yes, how did you overcome that crisis?	All measures mentioned with value code 1-9		74
63.	Are you currently facing any fuel scarcity?	1=yes 2=no		75
64.	If yes, when?	1=Throughout the year 2=Lean seasons 9=NA with value code 1-2 & 9		76
65.	If yes, how are you resolving the crisis?	All measures mentioned with value code 1-6		77
66.	if yes, what consequences are you facing?	All consequences mentioned with value code 1-9		78-80
67.	if no, do you have ready stock of cooking fuel?	1=yes 2=no	17	6
68.	If yes, what are the items?	All items mentioned with value code 1-6		7-9

69.	What do you do with stored fuel items?	Actual statement with value code 1-3		10-12
70.	Who collect cooking fuel items?	All collectors mentioned with value code 1-9		13... 18
71.	How much quantity (approx.) of fuel collected weekly by each collector?	Actual quantity collected by each collector in KG		19-20 29-30
72.	How much quantity (approx.) consumed by household for cooking?	Actual quantity in KG		31-33
73.	if sold, how much (annual)	Actual amount in taka		34-37
74.	Does your homestead forest supply edible food items?	1=yes 2=no		38
75.	If yes, how?	Actual food items mentioned with value code 1-9		39-41
76.	Does your family depend on homestead forest for staple food?	1=yes 2=no		42
77.	If yes, how?	Actual food items with value code 1-9		43-45
78.	Does forest food/fruit contribute/complement/supplement your household economy/ food/nutrition?	1=yes 2=no		46
79.	If yes, how?	Actual contributions with value code 1-5		47-49
80.	How much money (approx.) do you earn from selling fruit/fruit products? (annually)	Actual amount in taka		50-53
81.	Did you have huge fruit resource during Pakistani/British period?	1=yes 2=no		54
82.	If yes, would you pl. compare the differences to Bangladeshi period?	Actual differences mentioned with value 1-7		55-57

83.	Does your homestead forest fruit/fruit products create employment?	1=yes 2=no		58
84.	If yes, how?	All mentioned with value code 1-5		59-61
85.	Does homestead forest supply fodder as animal feed?	1=yes 2=no		62
86.	If yes, how?	Actual consumption mentioned with value code 1-9		63-65
87.	Does your homestead forest supply animal feed?	1=yes 2=no		66
88.	If yes, how do you use the resource as animal feed?	Actual uses mentioned with value code 1-9		67-69
89.	Who collect fodder?	All collectors mentioned with value code 1-9		70-72
90.	Pl. mention the annual value of your homestead forest fodder used for animal feed	Actual value in Taka		73-76
91.	Do you notice any shortage of animal fodder in the locality?	1=yes 2=no		77
92.	If yes, what are the possible reasons?	All reasons mentioned with value code 1-9		78-80
93.	Did you face any fodder crisis during Pakistani/British period?	1=yes 2=no	8	6
94.	If yes, reasons for such crisis?	All reasons mentioned with value code 1-4 & 9		7-9
95.	Do you think planting more fodder trees/plants could resolve the problem?	1=yes 2=no		10
96.	If yes, what are the species to be planted?	Name of the species with value code 1-9		11-13
97.	Does homestead forests provide plant medicine?	1=yes 2=no		14

98.	If yes, how?	Actual statement given with value code 1-5 & 9		15-17
99.	Does your family use herbal medicine?	1=yes 2=no		18
100.	If yes, who suggested to use plant medicine?	All sources mentioned with value code 1-5 & 9		19-21
101.	Why does your family use plant medicine?	All reasons mentioned with value code 1-9		22-24
102.	What kind of treatment could you get from the plant medicine for different diseases?	All treatment mentioned with variable labels a-m		25 37
103.	What type of treatment do your household members receive for different diseases?	All treatment methods mentioned with value code 1- 9		38-39
104.	Do you think usages of plant medicine has declined over the period? If yes, what are the reasons?	All reasons mentioned with value code 1-4 & 9		40-42
105.	Do homestead forests provide support for contingency expenditure?	1=yes 2=no		43

106.	If yes, how?	a) Wedding		44
		b) Religious festival		45
		c) Accident		46
		d) Medical treatment		47
		e) Purchase of land		48
		f) Purchase of clothing		49
		g) Purchase of fertilizer, seeds etc.		50
		h) House building		51
		i) House repair		52
		j) Buying of food & daily essentials		53
		k) Credit repayment		54
		l) Expenditure on cases		55
		m) Educational expenditure		56
		n) Miscellaneous		57
107.	Did you suffer from any kind of disaster during British and Pakistani period? If yes, pl. state what kind of diasters?	All disasters mentioned with value code 1-9		58.. 62
108.	What were the intensities of those disasters?	All mentioned with value code 1-5		63
109.	How did you cope with those disasters?	All coping strategies mentioned with value labels a-h		64 71
110.	Did you suffer from any kind of disasters during Bangladesh period?	1=yes 2=no 9=na		72
111.	If yes, what kind of disasters?	All disasters mentioned with value code 1-9		73 77
112.	How did you cope with those disasters?	All coping strategies mentioned with value labels a-h	19	6 13
113.	Do homestead forests provide income and employment for your household members and other people at village, local and regional level?	1=yes 2=no		14

114.	If yes, how?	All sources of income and employment from homestead forests with value code 1-9		15 18
115.	Who participate in homestead forest related income earning activities?	All participants with value code 1-9		20 25
116.	How do people participate in homestead forestry related income earning activities?	1=part time 2=full time 3=seasonal 4=others (specify)		26 28
117.	What types of products are generally available from homestead forests?	All products mentioned with value labels a-q		29 42
118.	Did you find any differences in availability of homestead forest products between Pakistani/British and Bangladesh period?	1=yes 2=no		46
119.	If yes, what are the main reasons for such differences?	All reasons mentioned with value code 1-9		47 49
120.	Who participate in homestead forestry processing activities mentioned in 117?	All participants with value code 1-9		50 53
121.	How are the participants involved in forestry activities?	1=full time 2=part time 3=seasonal 4=others		54 56
122.	Do the growers of homestead forests sale forestry products in market?	1=yes 2=no		57
123.	If yes, how?	Actual marketing facilities mentioned with value code 1-9		58 60
124.	Does the government extend any marketing facilities for homestead forest products?	1=yes 2=no		61

125.	If yes, how?	Actual facilities extended with value code 1-9		62-63
126.	Is there a wide scope for marketing?	1=yes 2=no		64
127.	If yes, how?	Suggested opportunities with value code 1-9		65 68
128.	How are the female members of your household involved in homestead forestry activities?	All activities mentioned with value code 1-9		69 77
129.	Pl. state in detail the social and cultural activities in the residential environment provided by homestead forests	All social and cultural activities mentioned with value code 1-9	20	6 14
130.	Pl. provide detailed information on how homestead forest provide ecological and environmental support for the rural folk and biotic community	All ecological and environmental supports mentioned with value code 1-9		15 20
131.	Is the any scope for planting more trees/plants/bamboo around your homestead?	1=yes 2=no		21
132.	If yes? What is your priority in planting trees? (in terms of fuel, fruit, fodder and timber trees)	Actual priority mentioned with value code 1-9		22 26
133.	What kind of species do you want to plant (fast growing/high valued)?	Name of species with value code 1-9		28 31
134.	Do you get any government loan/grant for planting/ management of homestead forests?	1=yes 2=no		32
135.	If yes, do you have any preference in getting such loan/grant?	1=yes 2=no		33

136.	If yes, what kind of arrangement would be preferred?	1=grant 2=long term interest free loan 3=short term loan with low interest 4=others (specify)		34-35
137.	Which institutes /organizations would you approach for loan/grant?	1=govt. 2=non-govt. 3=cooperatives 4=others (specify)		36-37
138.	Do you have any training on homestead forestry?	1=yes 2=no		38
139.	if no, would you prefer any training facility?	1=yes 2=no		39
140.	if yes, what kind of training would you prefer?	Actual training needed with value code 1-9		40 43
141.	Pl. provide your particular idea /suggestion for the overall improvement/ development of homestead forest resources	Actual ideas/ suggestions with value code 1-9		44 52
142.	Category of village people	1=rich 2=middle 3=poor		53

** Many of the value codes and some variable labels have been omitted due to their high numbers which would have made the questionnaire much more lengthy. If these are of interest to any researcher, the information could be provided on request.

* Apart from the structured and close-ended questionnaires, the survey also used unstructured and open-ended questionnaires. This study also collected a lot of useful information through observation and participation.