

Social Analysis Systems²

Concepts and Tools for
Collaborative Inquiry and Social Engagement

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Title

The Profile of Households in Tobacco Growing Regions of Bangladesh

Key Words

Social Domain, household profile, Bangladesh, agriculture, economic factors, environment, tobacco

Reference and Acknowledgement

Buckles, D. and F. Akhter 2006. The Profile of Households in Tobacco Growing Regions of Bangladesh. Social Analysis Systems² Technique Report #11, 12 pp. The authors wish to acknowledge the efforts of UBINIG staff and farmer leaders of the Nayakrishi Andolon, who helped to facilitate the diagnosis, and Jacques Chevalier, who provided useful comments on the report.

Context

Farmers grow tobacco on some 80,000 acres of agricultural land in Bangladesh, mainly under direct contract with the British American Tobacco Company (BATC). While tobacco is a cash crop for farmers, tobacco farming causes a wide range of environmental, social and health problems in farming communities, including deforestation, soil degradation, indebtedness, and poisoning from the use of pesticides and curing of tobacco leaves. The Government of Bangladesh, as part of its obligations under the World Health Organization's Framework Convention on Tobacco Control, has agreed to reduce the amount of land where tobacco is grown in Bangladesh. One of the main challenges is to find ways to maintain farmers' economic health as they shift away from growing tobacco.

The Bangladesh non-governmental organization UBINIG, in cooperation with Carleton University (Ottawa, Canada), is working with farmers who have expressed a desire to move away from tobacco into other kinds of farming. A two-year project to organize farmer-led experiments with alternatives to tobacco

began in 2006. It builds on a long history of collaboration between UBINIG and a national farmer's movement for ecological agriculture (Nayakrishi Andolon) that is active throughout Bangladesh, including the communities where the project is active (Kushtia and Bandarban Districts). As they cannot work with all households at the same time, the project needs to form sub-groups that can conduct and assess alternatives to tobacco. It wants to do so based on an understanding of the different kinds of economic activities, resources and other circumstances of households in the villages.

For more information on this project, see Akhter, F. and D. Buckles. 2006. *From Tobacco to Food Production: Assessing Constraints and Transition Strategies in Bangladesh*. First Interim Technical Progress Report to IDRC. 18 pp.

Purpose

To identify household profiles based on similarities and differences meaningful to local people, with a view to forming sub-groups that could conduct and assess farmer-led experiments with alternatives to tobacco.

Process Summary

UBINIG and the Nayakrishi Andolon convened meetings in 7 villages where tobacco farming is common and where farmers had expressed a desire to shift away from growing tobacco. Three villages were in Kusthia District and four in Bandarban District along the Matamuhuri River in the Chittagong Hill Tracts. Local farmer leaders invited villagers to the meetings. The purpose of the meetings was discussed and agreed among participants. The participants in the exercises understood that the results would be used in development of the project, and agreed to share their information.

Ten exercises were conducted—six with men only and four with women only. This was to ensure that women had the opportunity to state their views and raise issues, something that would be difficult for some women in mixed gender groups. The exercises

done in the Chittagong Hill Tracts involved some mixed ethnicity groups including indigenous communities and Bengali settlers, as well as some groups made up entirely of people from indigenous communities. The reason for these difference groupings was to provide opportunities for differences in cultural perspective to emerge. Between 12 and 20 people attended each exercise, held in parts of the village with shade and mats for outdoor seating. UBINIG staff and farmers with the Nayakrishi Andolon facilitated the exercises.

Participants were invited to think about 1) different kinds of jobs they and immediate family members are engaged in, and 2) the kinds of resources they have at their disposal. They were then asked to think about meaningful differences in these two factors among them. First, three people at random were asked to identify themselves and stand. They and the remaining participants were then asked to say which two people (and the households they belong to) had some job, activity or resource in common that was different from the third person. The common characteristic was labeled and its opposite was described. A card was prepared with these two opposing features. In some exercises, a drawing or object was used to represent the characteristic. Then, three other people at random stood so that more opposing characteristics could be identified. This proceeded until no new characteristics emerged from the group.

The cards of opposing characteristics were arranged in a column on the ground. Names of participants were written on other cards and arranged in a row to create a table of people and their characteristics. In each exercise, between 8 and 12 people were included in the table.

The extent to which individuals are currently growing tobacco emerged in all exercises and was used by facilitators (with permission from participants) as a dependent variable. The

characteristic was scored first, using a value of 1 for people in the group growing little or no tobacco and rising to 6 for people with large tobacco fields. Seeds such as corn and pulses were used to do the scoring instead of numbers. Once the scoring was complete, the columns (people) were rearranged from the lowest level of tobacco growing to the highest. Other opposing characteristics were then scored by the group for each person, using a scale of 1 to 6. Once the table was complete, participants reviewed the result on the ground, looking for rows and columns with similar scores. As the columns were organized from lowest to highest on the dependent variable (extent of tobacco) the group was able to explore why some farmers grow more tobacco than others. The major findings regarding different kinds of households were discussed and actions defined.

The same process was followed in all exercises, which took about 3 hours each to complete. Participants understood that their information would be used in reports, and agreed to share it with others. The authors later compared results from the different exercises using RepGrid software.

Analysis

The analysis by each group focused on identifying different types of households in the village, why some households grow more tobacco than others, and which kind of household should be involved in conducting or assessing farmer-led experiments with tobacco alternatives. Participants in each exercise identified between 4 and 6 opposite characteristics they considered to be meaningful distinctions within their group (Table 1). The extent to which people grow tobacco, farm size and the extent to which people grow food crops were characteristics identified by participants in all exercises. Age, frequency of wage work, frequency of tobacco trade, and livestock ownership were characteristics identified by many but not all of the groups. Less common features were fishing, use of a skilled trade (tailoring), sharecropping, and various forms of forestry (collection of

firewood and non-timber forest products and jhum cultivation, a form of forest-based agriculture). Overall, the features reflect different resources available to households (land, livestock), different activities they engage in (farming, wage work, fishing, forestry), and different stages in life (younger and older people).

Table 1: Characteristics identified during 10 exercises in Kushtia and Bandarban, Bangladesh

Group characteristics	Kachua women	Bhera-mamen	Chaitan men	Manikpur women	Manikpur men	Sabek men	Sabek settler women	Sabek ethnic women	Dardari men	Maijk men
	Kushtia			Bandarban						
1 little or no tobacco 6 large tobacco fields	x	x	x	x	x	x	x	x	x	x
1 little or no farmland 6 big farm	x	x	x	x	x	x	x	x	x	x
1 few food crops 6 many food crops	x	x	x	x	x	x	x	x	x	x
1 rarely do wage work 6 frequently do wage work	x		x	x				x		x
1 young 6 old	x	x	x							
1 few or no livestock 6 many livestock					x			x	x	
1 rare tobacco trade 6 frequent tobacco trade		x			x	x				
1 rarely fish 6 frequently fish							x			x
1 rare tailoring 7 frequent tailoring	x									
1 rarely sharecrop 6 frequently sharecrop									x	
1 little or no forestry 6 much forestry								x		x

Table 2 shows 5 features and related ratings from a men’s group in Bherama village, Kushtia. The exercise rated 11 participants on the degree to which they are involved in growing tobacco, ranging from 1 for people with little or no tobacco, to 6 for people with large

tobacco fields. They also rated the size of each person’s farm, ranging from 1 for people with little or no farmland, to 6 for people with a big farm. For each participant, the group rated the extent of food production (1 for few or no food crops and up to 6 for many food crops), the frequency of work as tobacco traders (1 for rarely trade in tobacco and up to 6 for those who often trade tobacco) and age (ranging from 1 for young, to 6 for old).

Table 2: Characteristics and ratings made by men in Bherama, Kushtia

Features	Aminul	Hakim	Razzak	Azizul	Nazmul	Alim	Abu Taleb	Huq	Salam
1 little or no tobacco 6 large tobacco fields	1	2	2	2	2	2	3	3	6
1 little or no farmland 6 big farm	6	4	1	2	6	4	2	3	6
1 few food crops 6 many food crops	5	3	4	4	5	2	2	4	3
1 rare tobacco trade 6 frequent tobacco trade	1	1	5	4	2	1	1	6	6
1 young 6 old	3	6	4	2	4	6	5	4	2

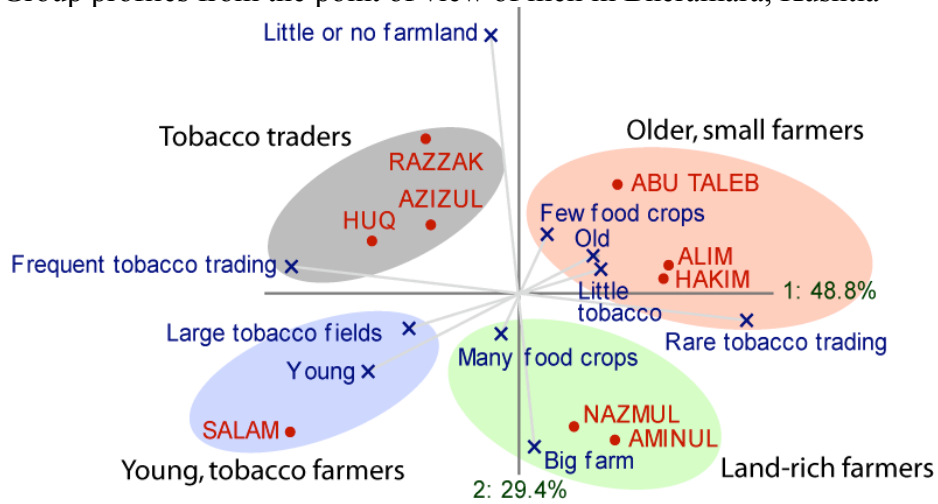
Row and column comparisons by the participants pointed to similar profiles among some of the men and their households. For example, it was clear to the group that Salam has a very different profile from the rest. He is a relatively young man with a big farm that mostly produces tobacco. He also engages in the tobacco trade. Nazmul and Aminul also have big farms but they choose to focus on food crops rather than tobacco. By contrast,

Huq, Azizul and Razzak are mainly tobacco traders, dedicating their relatively small farms to a mix of tobacco and food crops. Hakim, Abu Taleb and Alim are older farmers; they combine small amounts of tobacco and food crops on their mid to small-sized farms.

While other relationships in the data could not be easily seen by the participants, group discussion based on their observations noted that age was an important distinguishing factor: participants noted that the BATC directs its promotional campaigns and incentives in Kushtia toward younger farmers. They also pointed out that older farmers often transfer land to their children, and therefore lose control over the way the land is used. Participants concluded that the group was made up of households with one of four profiles: young tobacco farmers; older farmers with small areas of tobacco and food crops; tobacco traders with limited tobacco production of their own and; older, land-rich farmers with the flexibility to avoid tobacco farming. Figure 1 confirms and summarizes this pattern, based on an analysis of the data from Table 2 using RepGrid.

Figure 1 also suggests that being involved in the tobacco trade is particularly important to land-poor farmers such as Razzak, Azizul and Huq. This activity makes them different from other land-poor farmers, giving them a distinct profile that should be taken into account when evaluating alternatives to tobacco production.

Figure 1: Group profiles from the point of view of men in Bheramara, Kushtia¹



Similar profiles were found in other villages, with two notable exceptions. First, half of the exercises raised frequency of wage work as a distinguishing characteristic (Table 1). Some people in the groups rarely do wage work while others do it more often. Wage work in these communities often involves working in tobacco fields or in kilns where tobacco is dried. Three of the four women’s groups (Kachua, Manikpur, Sabek) observed this difference within their groups, as did two of the men’s groups (one in Kushtia and another in Bandarban). This observation points to another economic profile relevant to forming groups that will evaluate alternatives to tobacco: wage workers.

Second, regional differences emerged (Table 1). Age was not a distinguishing characteristic in Bandarban but was in Kushtia. Also, the lists of meaningful differences within most of the groups in Bandarban included activities not directly related to farming, such as livestock, fishing and forestry. These kinds of

¹ The statistical technique used to create this figure is called principal component analysis. It simplifies a data set by reducing the multi-dimensional relationships among observed variables to a cross-shaped, two-dimensional representation. In the figure, the scores assigned to people and characteristics (the observed variables) are mapped in relation to two fictive variables. The horizontal line (first component) represents a fictive variable that accounts for 48.8% of the total variance in the data (pattern of relationships among dots and crosses). The vertical line (second component) represents a fictive variable that accounts for another 29.4% of the total variance. Together, the two principal components account for 78.2% of the total variance.

livelihoods were not mentioned in any of the Kushtia exercises.

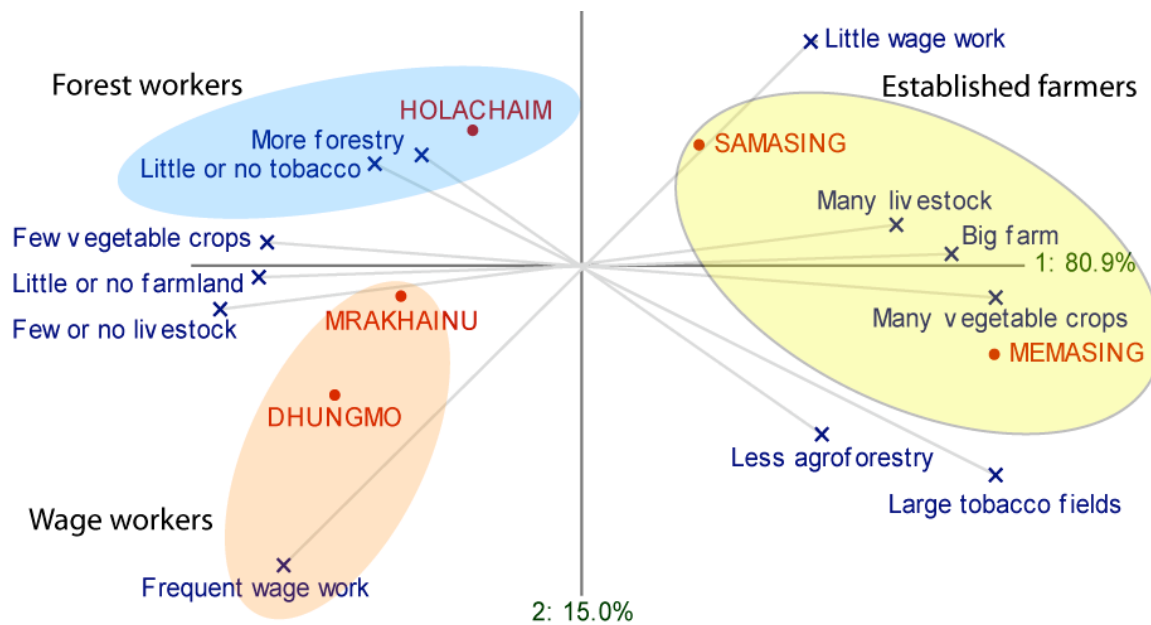
Analysis by one of the groups in Bandarban (ethnic women in Sabek) suggests that being involved in forestry is relevant when forming groups that will evaluate alternatives to tobacco growing. Table 2 shows the 6 characteristics and ratings for individuals in their group. They rated 5 people on the degree to which they are involved in tobacco production, ranging from 1 for people with little or no tobacco, to 6 for people with large tobacco fields. They also rated how involved people are in forestry work (ranging from 1 for little forestry work, to 6 for frequent forestry work). Forestry work referred mainly to collecting firewood but also included collecting and selling non-timber forest products for medicinal and other uses. The group identified other meaningful differences within their group: the size of each persons' farm (ranging from 1 for people with little or no farmland, to 6 for people with a big farm), the extent of vegetable production (1 for few or no vegetable crops, to 6 for many vegetable crops), the frequency of wage work (1 for rarely do wage work, to 6 for frequently do wage work), and the number of livestock they have (ranging from 1 for few or no livestock, to 6 for many livestock).

Table 3: Characteristics and ratings by ethnic women in Sabek, Bandarban.

Features	Holachaim	Memasing	Samasing	Dhungmo	Mrakhainu
1 little or no tobacco 6 large tobacco fields	1	6	1	1	1
1 little forestry work 6 frequent forestry work	5	1	6	4	4
1 little wage work 6 frequent wage work	1	1	1	6	4
1 few vegetable crops 6 many vegetable crops	1	6	4	1	1
1 few or no livestock 6 many livestock	2	6	5	1	2
1 little or no farmland 6 big farm	1	6	4	1	1

When participants compared rows and columns and discussed the findings, they concluded that their group had three profiles: established farmers (some of whom grow tobacco); forest workers who collect firewood and other resources from forests and; wage workers (mainly in tobacco production). Figure 2, based on an analysis by the authors using RepGrid, confirms and summarizes this pattern.

Figure 2: Group profiles from the point of view of ethnic women in Sabek, Bandarban



Interpretation

Participants interpreted findings only within their own communities. The various discussions converged, however, around a common theme. In general, profiles include households composed of established tobacco farmers, wage workers, land-poor farmers that grow small amounts of tobacco, and tobacco traders. Age tends to separate the farmers focused on tobacco production from those that adopt a mixed strategy or avoid tobacco, at least in Kushtia. Land is also a factor determining the extent to which farmers engage in tobacco production. Nevertheless, owning a big farm does not necessarily lead to a decision to grow tobacco: in some communities, farmers with

big farms have stayed out of tobacco production by focusing on food crops, livestock and even trade in tobacco.

In comparing all the exercises, the authors saw one important regional difference. In Bandarban, people seem to have access to many ways to earn a living, including fishing, livestock and forestry. As a result, their profiles less tightly structured and more diverse compared to Kushtia (Table 1 and Figures 1 and 2). This regional difference stems mostly from the different histories of tobacco in the two regions and access to different sets of resources. Kushtia, once an important food-growing region, has been dominated by tobacco production for more than 25 years. Other ways to earn a living have withered as have resources such as forests and water to support those other options. By contrast, growing tobacco is still relatively new to Bandarban and as a result people and their household profiles are less sharply defined by their relationship to tobacco. This is because extensive forests are nearby and water is abundant in the Matamuhuri watershed, two features of interest to the BATC. The distinct agro-forestry practices of the ethnic communities in the region also distinguish them from tobacco-dominated economies.

Action

Participant farmers, the Nayakrishi Andolon and UBINIG decided as a result of the exercises to form two different groups: 1) farmers leading experiments with alternatives to tobacco and, 2) villagers (including farmers) that would be affected by a widespread shift out of tobacco and whose views need to be taken into account when assessing the gains and losses associated with the alternatives.

In each village, a group of farmers was formed to do experiments with alternatives to tobacco. The group included established tobacco farmers (mainly young men) as well as older, land-poor farmers that had grown tobacco in the previous year. A second group made up of a wider set of household profiles was formed in each village to evaluate the gains and

losses associated with the tobacco alternatives. In Kushtia, this group included wage workers and tobacco traders along with the established tobacco farmers and the older land-poor farmers in the first group. In Bandarban, a fifth category of people was incorporated into the assessment group: people who use forest resources, both for tobacco and other purposes.

While the exercises did not reveal significant differences in household characteristics identified by men and women, all parties felt that it was important to continue meeting in gender groups. This would help to ensure that gender differences in economic assessment criteria would be included when assessing alternatives to growing tobacco.

Observations on the Process

The process of identifying different household characteristics stimulated a great deal of discussion among participants about the problems of tobacco farming and the need for alternatives. Many were keen to contribute to the exercise even though the method of group formation was new to them. They understood the need to have different types of households evaluate experiments with alternatives to growing tobacco, and recognized the relevance of the characteristics and profiles identified by them for this purpose. While no comparisons could be made across groups until all of the exercises were completed, the results of individual exercises were considered by participants to be useful to the task of group formation and true to the different economic circumstances of households in the village.