

Social Analysis Systems²

Concepts and Tools for
Collaborative Research and Social Action

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Title	Reasons for Growing Tobacco in Daulatpur, Bangladesh
Key Words	Causal Dynamics, Bangladesh, Agriculture, Environment, Tobacco
Reference and Acknowledgement	<hr/> <p>Buckles, D. and J.M. Chevalier. 2006. Reasons for Growing Tobacco in Daulatpur, Bangladesh. Social Analysis Systems² Technique Report #7, 6 pp. Retrieved from: http://idl-bnc.idrc.ca/dspace/handle/123456789/27426. The authors wish to acknowledge the efforts of Farida Akhter of UBINIG, who helped to facilitate the assessment.</p> <hr/>
Context	<p>Although Daulatpur in Kushtia District, Bangladesh was once an important food growing area, tobacco has been its main crop for more than 20 years. The British American Tobacco Company (BATC) has operations in various parts of the country. It promotes tobacco as a large-scale monocrop. Currently, tobacco accounts for the highest use per hectare of both fertilizers and pesticides of any major crop grown in Bangladesh. Despite these inputs, weeds infest many fields and soil quality is declining. The women and children in farming households who tend the fires needed to cure the tobacco leaves suffer ill health from inhaling the smoke. Farmers in Daulatpur are working with UBINIG, a Bangladeshi non-governmental organization active in the region for many years. They say they want to stop growing tobacco but feel they can't. The meeting with farmers was convened as a first step in finding ways to support their desire to shift out of tobacco production.</p> <p>For more information on this project, see Akhter, F. and D. Buckles. 2006. <i>From Tobacco to Food Production: Assessing Constraints and Transition Strategies in Bangladesh</i>. First Interim Technical Progress Report to IDRC. 18 pp.</p>

Purpose

To assess why farmers continue to grow tobacco, despite their concerns.

Process Summary

UBINIG hosted the assessment at its Centre in Pabna near Daulatpur. A group of 10 tobacco farmers (7 men and 3 women) participated. After talking about the purpose of the exercise, farmers stated their reasons for growing tobacco. These reasons were piled and sorted, with agreement from all, into a list of six. A large drawing on a blackboard of a tree with roots and branches was used to depict the relationships among all six factors. Each factor was scored on a scale of 1 to 5 by asking farmers to state the extent to which one factor (shown as a root of the tree) contributes to another (shown as a fruit on the branches of the tree). A double entry matrix was created from these ratings, with totals tallied by row and column. Farmers then rated on a scale of 1 to 7 the importance or weight of each factor as it relates to growing tobacco (apparent weight), and the importance that would remain if other factors did not exist (real weight). The participants discussed a summary figure (Graph 1) showing how various factors interact, and they decided on next steps. The lead author facilitated the exercise, and received permission from the participants to share their information.

Analysis

Table 1 shows the factors assessed and the ratings generated during the discussion. Farmer descriptions and explanations of the factors are:

- Tobacco production can pay well. The price for the highest grade of cured tobacco set by the BATC is high, but drops a lot for lesser quality leaf. Farmers hope that they will get the top price, even though most don't. Farmers also tend to underestimate the costs of inputs and losses due to poor harvests and curing problems.
- Some farmers have a card from the BATC, which provides them with credit to buy fertilizers, pesticides and seed. It also gives them an exclusive right to sell cured tobacco to the

Company. They can use the rights of the card to buy cured tobacco from other farmers, thereby setting themselves up as tobacco traders as well as producers. The BATC only provides a card to people with whom they have an established relationship.

- Tobacco farmers can receive a single payment for their entire crop. This is attractive because it provides a way to amass large sums for things like debt repayment, new land, houses, marriages or social obligations. It also provides the cash needed by those with who have a BATC Card so they can be part of the tobacco trade.
- There are currently no alternative cash crops farmers for farmers to consider or compare to.
- Most farmers in Daulatpur grow only tobacco. This creates social pressure to farm this way and increases the scale and efficiency of the BATC operations.
- Tobacco curing creates jobs, especially for women and children at home.

Table 1: Reasons why Daulatpur farmers continue to grow a tobacco monoculture

Factors	Can pay well	BATC Card facilities	Single payment	No alternate cash crops	Jobs created	Most grow tobacco	Cause Index Average rating (total score)
Can pay well	x	2	4	3	3	4	2.8 (14)
BATC Card facilities	3	x	4	4	3	3	3.8 (19)
Single payment	4	2	x	4	3	4	3.0 (15)
No alternative cash crops	4	2	3	x	1	5	2.6 (13)
Jobs created	3	0	0	2	x	3	1.8 (9)
Most grow tobacco	4	2	3	5	3	x	2.8 (14)
Effect Index Average rating (total score)	3.6 (18)	1.6 (8)	2.8 (14)	3.6 (18)	2.6 (13)	3.8 (19)	60% (90/150)
Apparent Weight	6	6	7	7	4	5	
Real Weight	3	4	4	6	1	3	

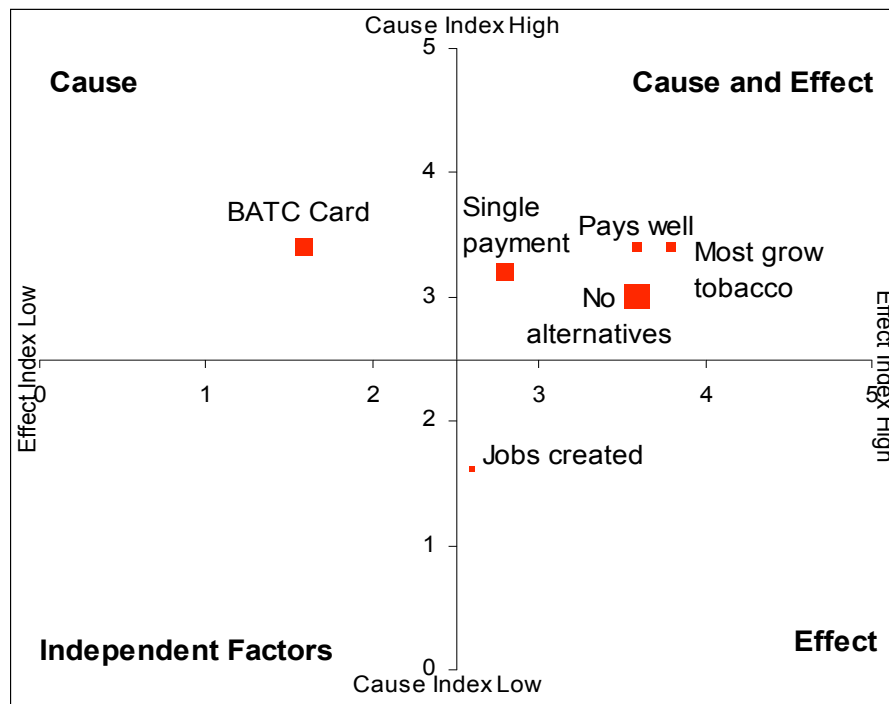
The last column in the table shows how much each factor causes or contributes to other factors (Cause Index) and the 8th row shows how much each factor is the effect of other factors (Effect Index). The Total Cause Index (60%), shown at the intersection of the two indices, provides an overall measure of the extent to which factors interact as causes and effects of each other. The apparent and real weights for each factor are shown in the last two rows of the table. Graph 1 shows these same factors when their cause index is plotted in combination with their effect index. The size of the square representing each factor (or its real weight) is larger for factors that would retain much of their weight even if other factors did not exist.

Four of six factors fall in the upper-right quadrant, reflecting factors that relate to other factors as both causes and effects. This result points to a situation of **integration** among the reasons for growing tobacco: farmers receive a single payment, it can pay well, most farmers in the area grow tobacco, and there are no alternative cash crops. These factors reinforce each other, which in turn helps farmers decide to continue to grow tobacco. The lack of other cash crops and the single payment would continue to be important factors (high real weight) even if other factors did not exist.

The BATC card and other kinds of credit (a factor located in the upper left quadrant) stands as a separate factor that contributes to other factors but does not depend on them. Participants noted that it has a strong impact on all other factors (values of 3 and 4 in the table), but is not itself affected much by them (values of 2 and 0). Participants also said that the real weight of this factor would persist even if other factors did not exist.

Participants noted that the jobs created by growing tobacco, a factor located in the lower right quadrant, is primarily an effect of other factors. The real weight of this factor would be low if other factors did not exist.

Graph 1: Reasons why Daulatpur farmers continue to grow tobacco



Interpretation

Farmers are trapped in a vicious circle of interacting factors that reinforce the decision to continue to grow a tobacco. This reflects the entrenched nature of tobacco farming in Daulatpur. Participants remarked that farmers have invested in developing a relationship with the BATC. They have also come to value the single payment for an entire crop and easy access to the inputs they need to produce tobacco (provided by the BATC card). Experimenting with new crops and other production systems, normally a feature of Bangladeshi agriculture, has stopped. Over time, the technology (seed and knowledge) and markets for traditional crops and livestock systems withered away. Tobacco farmers have become prisoners to their own investments in the crop. Farmers said that the various problems created by growing tobacco have become apparent to all, and concern has increased to a point where they now recognize the need for change.

Action

The course of action that emerged from the analysis was to start experimenting on a small scale with alternative cash crops. Participants argued that the lack of other cash crops is a

persistent and important reason why they continue to grow tobacco. Talk within the group focused on crops such as peanuts, jute, mustard seed, lentils, and pulses that can be grown in mixed farming systems, require few purchased inputs, store well and can be sold as needed at local and regional markets. Such crops also require a lot of labor. Participants concluded that if they start investing actively in tobacco alternatives with these characteristics it might create a chain effect on the other factors affected by it: tobacco may not pay as well when compared to the lower costs of alternative crops; the benefits of a single payment may not seem as compelling compared to a steady stream of income; fewer farmers may grow tobacco, encouraging others to make the shift as well.

While the real weight of the single payment and BATC card would persist even if other factors did not exist, participants concluded that there was nothing they could do directly about either of these factors.

The meeting ended with farmers deciding to experiment with other crop systems, and for UBINIG to help by providing access to seed, identifying markets, and working with farmers to broaden and deepen the criteria they use to assess the economic returns of these crops.

Observations on the Process

The main question “To what extent does A cause or contribute to B” was initially confused with “To what extent does B cause or contribute to A.” This problem was managed by using the tree metaphor and drawing. The analysis generated a lot of enthusiasm for experiments and provided some direction regarding what crop features to consider. The result of the exercise was considered a key turning point for participants interested in pursuing alternatives to tobacco. They noted that it provided them with a clear explanation of their situation that would be useful as well to discussions with other farmers not yet convinced of the kinds of investments they need to make to shift out of tobacco.