

(Fill in one per VLS household)

I. Household identification

1. New VLS Household Number	2. Old VLS Household Number

3. Village	4. Respondent Full Name

5. Interview date

	Day	Month	Year
1			
2			
3			
4			

Head of Household Information

6. Full name
7. Address
8. Phone (if phone)
9. Email (if e-mail)

10. Full name field investigator
11. Was Annemie present at the interview?
12. Was the senior investigator present at the interview? (and give name if yes)
13. Date when data checked by field investigator:
14. Date when data checked by Annemie:
15. Date when data entered in Stata by Annemie:

II. Family composition and identity

INTERVIEWER CHECKPOINT: For each household member, fill in one line, person by person.

No.	1. Name of member	2. Sex Male.....1 Female....2	3.Age Years	4. Mem- ber ID	5. Spouse of In the case of a man, fill in the new female ID; in the case of a woman, fill in the new male ID		6. Child of Both parents need to be filled in, the mother in the new female ID, the father in the new male ID		7. Current marital status Unmarried....1 Married.....2 Separated....3 Divorced.....4 Widowed.....5	8. Degree of disability For family members older than 15 years SEE CODEBOX ¹	9. Does this person currently live in your home? Yes...1 (>>14) No.....0
				NEW	MALE ID	FEMALE ID	MALE ID	FEMALE ID			
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											

¹ (9) CODEBOX DISABILITY: any farm or domestic work...1; only domestic work...2; only light farm work...3; only light domestic work....4; completely disabled....5

N O	CURRENT MIGRATION STATUS								14. What is the highest education level this person <u>passed</u> ?	15. Main occupation last 12 months? In terms of time use	16. Subsidiary occupation last 12 months? In terms of time use	17. How many years does this person have experience in the main occupation?	18. How many years does this person have experience in the subs. occupation?
	10. Where does this person currently live? Name location	11. How far away is this location from your home?			12. How frequent does this person visit the house? > once a month.....1 once a month.....2 > once a year.....3 once a year.....4 once in 2-3 years....5	13. What is the purpose of migration and the date that the person moved out? SEE CODEBOX ² Purpose Month Year							
		Km	Hrs	Min									
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													

² (15) CODEBOX PURPOSE OF MIGRATION: work.....1 ; marriage.....2; study.....3; holiday.....4; personal.....5; other.....specify

No	CASTE AND RELIGION										27. Does or did this person belong to any of the following organization? Yes.....1 No.....0 (skip page 5 for this person)	
	19. Caste and religion <u>at birth</u> This refers to the name of the <i>jati</i> , eg Maratha, Gowda, Mala		20. <u>Current (personal)</u> caste and religion This refers to the name of the <i>jati</i> , eg Maratha, Gowda, Mala		21. Current (personal) caste category This refers to the categories SC, ST, OBC, FC	22. <u>Current (official)</u> caste and religion		23. Current (official) caste category This refers to the categories SC, ST, OBC, FC	24. INTERVIEWER CHECKPOINT Are (19), (20) and (22) different? Yes.....1 No.....0 (>>27)	25. When did this person take up (20) and/or (22)? Year		26. Why did this person take up (20) and/or (22)?
	Caste	Religion	Caste	Religion		Caste	Religion					
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

INTERVIEWER CHECKPOINT: Fill the following table for the family members who belong(ed) to any organization in the **past 7 years for any period of time**. Take one line per person/organization combination.

Copy No of previous page for each individual	28. Name of individual	29. Type of organization SEE CODE-BOX BELOW³	30. From when to when does/did this person join this organization? If still a member write 'current' with ending date				31. Did this person ever hold a position of leadership in this group? Yes.....1 No.....0 (>> next line)	32. Which position was/is this? Name position	33. When does/did this person hold this position? If still a member write 'current' with ending date			
			Starting date		Ending date				Starting date		Ending date	
			Month	Year	Month	Year			Month	Year	Month	Year

³ (31) CODEBOX TYPE OF ORGANIZATION

Raithu Mitra or farmers'1	Manhila Mandal (women's ass).....8	Chit fund.....15	Political groups, political parties.....22
Farmers' cooperative.....2	Health/nutrition committee.....9	Market committee.....16	Religious group (church, Bhajan.....).....23
Water User Association (canal).....3	Self-Help Groups10	Traders' association.....17	Cultural group.....24
Borewell User Association.....4	Education/Vidya Committee.....11	Business group.....18	Sport group.....25
Watershed group.....5	Mothers' committee (eg. Agawadi Center).....12	Youth group.....19	Dispute committee.....26
Garam Panchayat.....6	Library group.....13	Labor union.....20	Other.....specify
Caste group/association.....7	Credit society/cooperative.....14	NGO.....21	

INTERVIEWER CHECKPOINT: These questions are related to the respondent's self-perception.

If the respondent has not made any farming decisions in any of the last seven years, cross the box on the right and proceed to 36 ☐

<p>34. (S) Compared to other farmers, how do you judge your own farming abilities?</p> <p> <input type="checkbox"/> Much worse than others <input type="checkbox"/> Somewhat worse than others <input type="checkbox"/> About the same as others <input type="checkbox"/> Somewhat better than others <input type="checkbox"/> Much better than others </p> <p><input type="checkbox"/> Do not know</p>
<p>35. (S) Compared to other farmers, how often do you have doubts related to which agricultural practices to use?</p> <p> <input type="checkbox"/> Much more often than others <input type="checkbox"/> Somewhat more often than others <input type="checkbox"/> Somewhat less often than others <input type="checkbox"/> About the same as others </p> <p> <input type="checkbox"/> Much less often than others <input type="checkbox"/> Do not know </p>
<p>36. (S) Compared to others, how educated do you consider yourself?</p> <p> <input type="checkbox"/> Much less than others <input type="checkbox"/> Somewhat less than others <input type="checkbox"/> About the same as others <input type="checkbox"/> Somewhat better than others <input type="checkbox"/> Much better than others </p> <p><input type="checkbox"/> Do not know</p>
<p>37. (S) Compared to others, you think that you take:</p> <p> <input type="checkbox"/> Much less risks <input type="checkbox"/> Somewhat less risks <input type="checkbox"/> About the same risks <input type="checkbox"/> Somewhat more risks <input type="checkbox"/> Much more risks </p> <p><input type="checkbox"/> Do not know</p>
<p>38. (S) Compared to others, how often do you make decisions quickly/fast?</p> <p> <input type="checkbox"/> Much more often than others <input type="checkbox"/> Somewhat more often than others <input type="checkbox"/> About the same as others <input type="checkbox"/> Somewhat less often than others </p> <p> <input type="checkbox"/> Much less often than others <input type="checkbox"/> Do not know </p>
<p>39. (S) Compared to others, how much do you plan ahead?</p> <p> <input type="checkbox"/> Plan ahead much less than others <input type="checkbox"/> Plan ahead somewhat less than others <input type="checkbox"/> About the same as others <input type="checkbox"/> Plan ahead somewhat more than others </p> <p> <input type="checkbox"/> Plan ahead much more than others <input type="checkbox"/> Do not know </p>
<p>40. (S) Compared to others, do you get angry easily?</p> <p> <input type="checkbox"/> Get angry much more easily than others <input type="checkbox"/> Get angry somewhat more easily than others <input type="checkbox"/> About the same as others </p> <p> <input type="checkbox"/> Get angry somewhat less easily than others <input type="checkbox"/> Get angry much less easily than others <input type="checkbox"/> Do not know </p>
<p>41. (S) How do you feel about the following statement 'if one works hard, one can improve one's situation in life'</p> <p> <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Neutral <input type="checkbox"/> Agree <input type="checkbox"/> Strongly agree </p> <p><input type="checkbox"/> Do not know</p>

	42. INTERVIEWER CHECKPOINT: Name of Individual	43. Did this person ever inherit or joint inherit land? Yes.....1 No.....0 (>> next person)	44. How many acres did this person inherited? If joint inheritance, put inheritance with the name of the eldest		In case of joint inheritance only
			Dryland (acres)	Irrigable (acres)	45. Indicate with a cross whether this person is part of this joint inheritance
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

III. Major sources of income during kharif 2007)
(1 June 2007 – 15 January 2008 for non agricultural income)
(1 June 2007 up to harvest for agricultural income)

Earned Income	(net-earnings) Rs
1. Agriculture (crops)	
2. Farm work (agricultural laborer)	
3. Livestock (milk and milk products)	
4. Regular farm servant	
5. Income from selling sheep, goats, chicken, meat, eggs, wool (all animals)	
6. Income from selling dung	
7. Selling Common Property Resources (firewood, fruits, stones, mats, and leaf plates)	
8. Selling of water for agricultural purposes	
9. Caste occupation: specify.....	
10. Stitching cloths	
11. Handicrafts	
12. Non farm work (wage) (government and private)	
13. Other business: specify.....	
14. Out migration (of temporary migrants)	
Un-earned income	(net-earnings) Rs
15. Remittances	
16. Income from hiring out bullocks	
17. Rental income from machinery	
18. Rental income from leased out – shared out land	
19. Rental income from renting buildings, houses, apartments, rooms	
20. Interest on saving and on money lending	
21. Dowry received (cash and kind)	
22. Cash and gifts received	
23. Pension	
24. Other government welfare/development programs	
Others:	(net-earnings) Rs
25.....	

IV. Farm equipment

1. How many of the following items does your household own?

Desi plough	Modern plough	Blade harrow	Blade hoe	Seed drill	Chaff cutter	Manual sprayer/duster	Bullock cart	Pipeline

	2. Do you currently own a.....? yes.....1 no.....0 (>> next item)	3. What is the type of item you own? in Watt	4. Do you share ownership with another household? If yes, mention %, if no write 100%	5. When did you buy the item? Month/ Year	6. What was the price when you bought the item? In Rs	7. How much would you receive when you would sell the item today? In Rs	8. What was the total amount borrowed ? If 0 >> next item	9. Are you paying interest on this loan? Yes.....1 No.....0 (>> 11)	10. What is the rate of interest? Rate Unit		11. How often do you make payments? Daily.....1 Weekly.....2 Monthly.....3 Quarterly....4 Annual.....5 One final.....6 (>>14) No set schedule....7 (>>14)	12. What amount do you pay at each payment? Rs	13. How many payments do you have to make to repay the loan? (>>15) Number	14. How much will you repay in the end? Rs	15. When will you finish repay the loan? Month /year
Agro processing unit															
Rice/flour mill/grinder															
Tractor and accessories															
Sprinkler set															
Drip irrigation															
Submersible pump															
Power sprayer / duster															
Truck															
Thresher															
Electric motor															
Diesel pump															
Cane crusher															
Others:															

INTERVIEWER CHECKPOINT: Collect data on all the plots during all seasons of 07-08 including the standing crop.

INTERVIEWER CHECKPOINT: Collect data on all the plots during all seasons of 07-08 including the standing crop.

⁴ (3) CODEBOX OWNERSHIP: owned..... 1; shared-in on crop share.....2; leased-in on fixed rent (cash)...3; leased-in on fixed rent (kind)....4; shared-out on crop share.....5; leased-out on fixed rent (cash).....6; leased-out on fixed rent (kind).....7

Plot code	9. What is the area of permanent fallow and uncultivable land? acre	10. What is the cultivated area? acre	INTER-VIEWER CHECK-POINT: Written down this plot before? Yes.....1 (>>next line) No.....0 acre	IRRIGATION STATUS			SOIL QUALITY (farmer's view)			
				11. What is the irrigable area? This is the area that is covered by an irrigation facility If 0 >>14 acre	12. What is the source of irrigation on this plot? Open well.....1 Borewell.....2 Tube well.....3 Main canal.....4 Tank/pond.....5 River.....6 Canal.....7 Others.....Specify	13. What is the distance from the irrigation source? meters	14. What is the soil type of this plot? Red soils.....1 Sandy soils.....2 Murrum soils....3 Deep black.....4 Medium black...5 Shallow black...6 Saline/alkaline..7 Problematic.....8	15. What is the soil depth of this plot? cm	16. How would you rank the soil fertility of this plot? Very good....1 Somewhat good.....2 Average.....3 Somewhat poor.....4 Very poor.....5	17. What is the slope of this plot? Leveled 0-1%.....1 Slight slope 1-3%.....2 Medium slope 3-10%.....3 Steep slope >10%.....4

Plot code	SOIL QUALITY (farmer's view)					LAND VALUE		PLOT LOCATION		
	18. Does this plot suffer from soil degradation? No problem.....1 Small problem.....2 Severe problem.....3					19. Does this plot have bunds? Yes.....1 No.....0	20. What is the number of trees on this plot?	21. What would your estimate be of the value of this plot (per acre) if one were to sell it today? This includes trees on the plot. Rs/acre	22. What is the distance from the plot to your home? km	23. How long does it take you to get to this plot? ⁵ minutes
	Soil erosion	Nutrient depletion	Waterlogging	Salinity/acidity	Specify					

VII. Current and past information networks within the village through random matching within sample

INTERVIEWER CHECKPOINT: Let the respondent draw 6 names out of the cotton bag.

Code	Yes.....1	No.....0	Don't know....DK
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1. New VLS HH number of X and name					
2. Do you know X?					
3. How long have you known X? (years)					
4. How did your relationship with X change after you became a part of the VLS? Better...1; Same.....2; Worse.....3					
5. Is X or a member of his family a member of a same organization (on page 6) as you or a member of your family? Yes...INDICATE CODE OF PAGE 5; No.....0					
SEE MANUAL FOR NOTATION					
6. Does X live in the same neighborhood as you in the village?					
7. How frequently do you or a member of your household talk to X or a member of his/her household?					
SEE MANUAL FOR NOTATION					
8. How risks averse are you compared to X? SEE CODEBOX					
9. Is X or a member of his/her household a farmer (last 7 years? If no or DK >>21					
10. Is the respondent or a member of his household a farmer (last 7 years)? Yes....1; No.....0 (>> 14)					
11. Do you pass by X's field if you go to your farm?					
12. Does X have a field neighboring one of your fields?					
13. How profitable do you think X is on the farm compared to your farm? SEE CODEBOX					
14. Did X's family farm cotton in Kharif 2007? If no (>> 21)					
15. What is the soil type of the soil on which X's family farmed cotton in Kharif 2007? SEE CODEBOX					
(8) RISK AVERSION COMPARISON X takes much more risk.....1 X takes somewhat more risk.....2 X takes about the same level of risk....3	X takes somewhat less risk.....4 X takes much less risks.....5	(13) PROFITABILITY COMPARISON Res. is much more profitable than X.....1 Res. is somewhat more profitable than2 Res. is about the same than X.....3	Res. is somewhat less profitable than X.....4 Res. is much less profitable than X.....5	(15) SOIL TYPE X Red soils.....1 Sandy soils.....2 Murrum soils.....3	Deep black.....4 Medium black.....5 Shallow black.....6 Saline/alkaline.....7 Problematic.....8

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VLS HH No:

COPY NEW VLS NUMBER					
16. What is the soil fertility of the soil on which X's family farmed cotton in Kharif 2007? SEE CODEBOX					
17. Does X's family have access to irrigation on their cotton field in Kharif 2007?					
18. Which cotton cultivar(s) did X's family use in Kharif 2007?					
Indicate whether this is known through observation (O), conversation (C) or third party (T)					
19. What was the cotton yield obtained by X's family in Kharif 2007 for these cultivar(s)? in quintal/acre Write in same order as cultivars in 18 ; Indicate whether this is known through observation (O) ,conversation (C) or third party (T)					
20. How many times did X's family spray pesticides in Kharif 2007 on his cotton cultivar(s)? in number of sprays Write in same order as cultivars in 18 Indicate whether this is known through observation (O) , conversation (C) or third party (T)					
21. Does the respondent's family farm cotton (past 7 years)? If no >> next person					
22 Interviewer checkpoint: Did the respondent think that X farmed cotton (see 9 and 14), If no >> 25					
23. In Kharif 2007, how was X's family yield (quintal/acre) compared to yours? SEE CODEBOX					
24. In Kharif 2007, how was X's family pesticide use (number of sprays) compared to you? SEE CODEBOX					
25. Do you think X knows your cotton yield of Kharif 2007?					
26. Do you think X knows your pesticide use during Kharif 2007 (in number of sprays)?					
27. If you had a problem with your cotton crop <u>WOULD</u> you approach X for advice?					

(16) SOIL FERTILITY X Very good.....1 Somewhat good.....2 Average.....3 Somewhat poor.....4 Very poor.....5	(23) YIELD COMPARISON Resp has much higher yield than X1 Resp has a somewhat higher yield than X.....2 Resp yield is about same than X.....3 Resp has a somewhat lower yield than X.....4 Resp has a much lower yield than X.....5	(24) PESTICIDE USE COMPARISON Resp uses much more than X.....1 Resp uses somewhat more than X.....2 Resp uses about the same than X.....3 Resp uses somewhat less than X4 Resp uses much less than X.....5
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1. New VLS HH number of X and name		PF1	PF2	PF3	PF4
2. Do you know X?					
3. How long have you known X? (years)					
4. How did your relationship with X change after you became a part of the VLS? Better...1; Same.....2; Worse.....3					
5. Is X or a member of his family a member of a same organization (on page 6) as you or a member of your family? Yes...INDICATE CODE OF PAGE 5; No.....0					
SEE MANUAL FOR NOTATION					
6. Does X live in the same neighborhood as you in the village?					
7. How frequently do you or a member of your household talk to X or a member of his/her household?					
SEE MANUAL FOR NOTATION					
8. How risks averse are you compared to X? SEE CODEBOX					
9. Is X or a member of his/her household a farmer (last 7 years? If no or DK >>21					
10. Is the respondent or a member of his household a farmer (last 7 years)? Yes....1; No.....0 (>> 14)					
11. Do you pass by X's field if you go to your farm?					
12. Does X have a field neighboring one of your fields?					
13. How profitable do you think X is on the farm compared to your farm? SEE CODEBOX					
14. Did X's family farm cotton in Kharif 2007? If no (>> 21)					
15. What is the soil type of the soil on which X's family farmed cotton in Kharif 2007? SEE CODEBOX					

(8) RISK AVERSION COMPARISON	X takes	(13) PROFITABILITY COMPARISON	Res. is somewhat less	(15) SOIL TYPE X	Deep black.....4
X takes much more risk.....1	somewhat less	Res. is much more profitable than X.....1	profitable than X.....4	Red soils.....1	Medium black.....5
X takes somewhat more	risk.....4	Res. is somewhat more profitable than2	Res. is much less profitable	Sandy soils.....2	Shallow black.....6
risk.....2	X takes much	Res. is about the same than X.....3	than X.....5	Murum soils.....3	Saline/alkaline.....7
X takes about the same level of risk.....3	less risks.....5				Problematic.....8

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VLS HH No:

COPY NEW VLS NUMBER		PF1	PF2	PF3	PF4
16. What is the soil fertility of the soil on which X's family farmed cotton in Kharif 2007? SEE CODEBOX					
17. Does X's family have access to irrigation on their cotton field in Kharif 2007?					
18. Which cotton cultivar(s) did X's family use in Kharif 2007?					
Indicate whether this is known through observation (O) , conversation (C), or third party (T)					
19. What was the cotton yield obtained by X's family in Kharif 2007 for these cultivar(s)? in quintal/acre Write in same order as cultivars in 18 ; Indicate whether this is known through observation (O) , conversation (C) or third party (T)					
20. How many times did X's family spray pesticides in Kharif 2007 on his cotton cultivar(s)? in number of sprays Write in same order as cultivars in 18 Indicate whether this is known through observation (O) , conversation (C) or third party (T)					
21. Does the respondent's family farm cotton (past 7 years)? If no >> next person					
22 Interviewer checkpoint: Did the respondent think that X farmed cotton (see 9 and 14), If no >> 25					
23. In Kharif 2007, how was X's family yield (quintal/acre) compared to yours? SEE CODEBOX					
24. In Kharif 2007, how was X's family pesticide use (number of sprays) compared to you? SEE CODEBOX					
25. Do you think X knows your cotton yield of Kharif 2007?					
26. Do you think X knows your pesticide use during Kharif 2007 (in number of sprays)?					
27. If you had a problem with your cotton crop <u>WOULD</u> you approach X for advice?					
(16) SOIL FERTILITY X Very good.....1 Somewhat good.....2 Average.....3 Somewhat poor.....4 Very poor.....5		(23) YIELD COMPARISON Resp has much higher yield than X1 Resp has a somewhat higher yield than X.....2 Resp yield is about same than X.....3 Resp has a somewhat lower yield than X.....4 Resp has a much lower yield than X.....5		(24) PESTICIDE USE COMPARISON Resp uses much more than X.....1 Resp uses somewhat more than X.....2 Resp uses about the same than X.....3 Resp uses somewhat less than X4 Resp uses much less than X.....5	
NAME					
(28) RANK					

VIII. Additional Details on Cotton Production and MarketingINTERVIEWER CHECKPOINT: If this section is filled in using a farm logbook, cross the box on the right. ☐

Year	1. Did you grow cotton this year? Yes.....1 No.....0 (>> skip remaining questions of this year)		2A. Which cultivar did you grow?	2B. Who made the decision of (2A)? Member ID	3. Was this a Bt cotton cultivar? Yes.....1 No.....0	4. What is the name of the plot on which the crop was sown?	5A. What was the acreage of this cultivar? Acre	5B. If intercropping, write the row arrangement. Write the abbreviations used below the table	Pesticide Application		
									6. Did you apply any pesticides? Yes.....1 No.....0 (>> 9)	7. How many times did you apply pesticide? Number	8. Give the timeline of the pesticide application SEE MANUAL FOR NOTATION
2007-2008		Cotton crop 1									
		Cotton crop 2									
		Cotton crop 3									
2006-2007		Cotton crop 1									
		Cotton crop 2									
		Cotton crop 3									
2005-2006		Cotton crop 1									
		Cotton crop 2									
		Cotton crop 3									
2004-2005		Cotton crop 1									
		Cotton crop 2									
		Cotton crop 3									
2003-2004		Cotton crop 1									
		Cotton crop 2									
		Cotton crop 3									
2002-2003		Cotton crop 1									
		Cotton crop 2									
		Cotton crop 3									
2001-2002		Cotton crop 1									
		Cotton crop 2									
		Cotton crop 3									

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VLS HH No:

Year		Water Application				13. In how many pickings did you harvest the crop? Number	14. What is the proportion of saved seeds/total seeds used? If only saved seeds are used >> 18	Seeds	
		9. How many times did you irrigate the crop? If 0 >> 11	10. Give the timeline of the water application SEE MANUAL FOR NOTATION	11. Did you want to irrigate the crop more, but you could not? Yes.....1 No.....0 (>>13)	12. Reason? SEE CODEBOX			15. From whom did you buy the seeds? SEE CODEBOX RELATIONSHIP	16. What is the location of (15)?
2007-2008	Cotton crop 1								
	Cotton crop 2								
	Cotton crop 3								
2006-2007	Cotton crop 1								
	Cotton crop 2								
	Cotton crop 3								
2005-2006	Cotton crop 1								
	Cotton crop 2								
	Cotton crop 3								
2004-2005	Cotton crop 1								
	Cotton crop 2								
	Cotton crop 3								
2003-2004	Cotton crop 1								
	Cotton crop 2								
	Cotton crop 3								
2002-2003-	Cotton crop 1								
	Cotton crop 2								
	Cotton crop 3								
2001-2002	Cotton crop 1								
	Cotton crop 2								
	Cotton crop 3								
(12) REASON		(15) RELATIONSHIP							
Well permanently dry.....1		No water in main canal.....4				Farmer from village.....1			
Well temporarily dry.....2		Little water in main canal.....5				Farmer from outside the village.....2			
Well little water.....3		Other.....Specify				Input dealer.....3			
		Directly from company.....4				Government extension agent.....5			
		Other.....Specify							

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VLS HH No:

Year		17. Was this the first time that you went to this provider? Yes.....1 No.....0	18. From whom did you buy the other inputs? SEE CODEBOX FOR COLUMN 1 Put a cross in the second column if same person(s) as provider of seeds	19. Did you buy any of the inputs on credit? Yes...1 No.....0	20. To whom did you sell the crop? SEE CODEBOX FOR COLUMN 1 Put a cross in the second column if same person(s) as provider of seeds	INTERVIEWER CHECKPOINT: If (20) has a cross in the second column. 21. Were you required to sell the crop to this person? Under which conditions?
2007-2008	Cotton crop 1					
	Cotton crop 2					
	Cotton crop 3					
2006-2007	Cotton crop 1					
	Cotton crop 2					
	Cotton crop 3					
2005-2006	Cotton crop 1					
	Cotton crop 2					
	Cotton crop 3					
2004-2005	Cotton crop 1					
	Cotton crop 2					
	Cotton crop 3					
2003-2004	Cotton crop 1					
	Cotton crop 2					
	Cotton crop 3					
2002-2003	Cotton crop 1					
	Cotton crop 2					
	Cotton crop 3					
2001-2002	Cotton crop 1					
	Cotton crop 2					
	Cotton crop 3					
(18) RELATIONSHIP		Directly from/to company.....4		(20) RELATIONSHIP		Commission agent.....4
Farmer from village.....1		Government extension agent.....5		Farmer from village.....1		Trader who comes to village.....5
Farmer from outside the village.....2		Other.....Specify		Farmer from outside the village.....2		Trader at regulated market.....6
Input dealer.....3				Input dealer.....3		Other.....Specify

IX. Social learning and Imitation**Section A: Time line of Bt cotton adoption**

1. Have you ever grown cotton? Yes.....1 No.....0		9. Which cropping years did you NOT grow Bt cotton? List years	
2. Have you ever heard of Bt cotton? Yes.....1 No.....0 (>> 16)		10. (S) Why did you not grow Bt cotton in those years? List reasons	
3. When did you <u>first</u> hear about Bt cotton? Year		11. The year you <u>first</u> grew Bt cotton, did you adapt your management practices compared to the non-Bt cotton? Explain how	
4. From whom did you <u>first</u> hear about Bt cotton? Name		12. Did you adapt your management practices afterwards? Explain how	
5. What is your relationship with this person or organization? SEE CODEBOX SEE MANUAL FOR NOTATION		INTERVIEWER CHECKPOINT: Do (3) and (7) match, if no: 13. (S) Why did you not grow Bt cotton immediately? (>> 16)	
6. Have you ever grown Bt cotton? Yes.....1 No.....0 (>> 14)		14. (S) Why did you never grow Bt cotton?	
7. In which year did you first grow Bt cotton? Year		15. (S) If you would have access to a good piece of land and irrigation, would you grow Bt cotton? Yes...1, No...0, May be....2	

(5) RELATIONSHIP
Farmer from village.....1
Farmer from outside the village.....2
Relative from village.....3
Relative outside of village.....4
Input dealer.....5
NGO.....6
Government extension agent.....7
TV and radio.....8
Newspaper, magazine.....9
Other.....specify

16. Interviewer checkpoint: if the household is not a farming household (last 7 years), cross the box, and proceed to section B <input type="checkbox"/>	
17. (S) Who in your household makes the decisions related to the farm? Mention member ID's in order of importance	
18. (S) What are the main issues you take into account when you decide on the cropping pattern? Mention issues, in order of importance.	
19. (S) Do you first decide on the cropping pattern, or first on whether or not to lease-in (share-in) lease-out (share-out) land?	
20. (S) Would you (did you) ever consider buying inputs on credit?	
(S) Imagine you had decided to buy inputs on credit:	
21. Who would you approach? Mention 3 in order of importance SEE RELATIONSHIP CODEBOX	22. If you approached this person/institution, would you get the credit? Yes....1, No.....0, May be....2
23. Interviewer checkpoint: if the household has not farmed any cotton in the last 7 years, cross the box, and proceed to section B <input type="checkbox"/>	
24. (S) Was there any time in the last 7 years that either Bt seeds or non Bt seeds were hard to come by? <u>Explain and mention the years concerned.</u>	
25. (S) When your cotton crop is growing, when do you decide to apply pesticides? (Do you wait for until you see a disease, until you see the pest, or you just spray at fixed intervals?). What is the ideal number of sprays (if such an ideal exists)? Explain.	
26. (S) Do you think a cotton field requires crop rotation? Explain.	
27. Do you practice crop rotation on your cotton fields? Explain.	

(21) RELATIONSHIP	Relative outside of village.....4	Other.....specify
Farmer from village.....1	Input dealer.....5	
Farmer from outside the village.....2	Commission agent.....6	
Relative from village.....3	Private bank.....7	

Section B: Learning from organizations

INTERVIEWER CHECK POINT: If the respondent has never heard about Bt Cotton, check this box and go section to C ☐

(S) In the last seven years you have learned and heard a lot about Bt cotton. Could you list the organizations, people, media, courses from whom you learned about Bt cotton **(excluding fellow farmers)**? Consider NGOs, government extension workers, companies, ICRISAT and media such TV channels, radio and magazines. Take one line per incidence, start with the most recent events, and go back in time.

No	1. Name	2. Relationship SEE CODEBOX	3. When did you receive information? Month/Year	4. Did you obtain the information through: SEE CODEBOX Multiple answers allowed	5A. Did the information concern one particular cultivar? Yes... mention cultivar No.....0	5B. Did you obtain any specific information about pesticide use? Yes.....1 No.....0 (>>7) Don't know.DK (>>7)	6. Do you recall the recommended number of spraying or the recommended pesticide schedule? SEE MANUAL FOR NOTATION	7. Did you have the travel somewhere to get this information? Yes....write time No.....0 Hours Minutes	
1									
2									
3									
4									
5									
6									
7									
8									

(2) RELATIONSHIP Input dealer.....1 NGO.....2 Government extension worker.....3 TV.....4	Radio.....5 Newspaper, magazine.....6 ICRISAT.....7 Other.....Specify	(4) OBTAIN INFORMATION THROUGH: Conversation.....1 Observation.....2 Listen to lecture.....3 Other.....Specify
--	--	--

No	8. Did you have to pay a fee to get this information? Yes.....fee in Rs No.....0	9. Was this information useful to you? SEE CODEBOX	10. How did this information change your opinion about Bt cotton? SEE CODEBOX EXPECTED YIELD VARIANCE		(9) USEFULNESS OF INFORMATION Very useful1 Somewhat useful....2 Not useful.....3
1					(10) CHANGE OPINION YIELD Much more favorable.....1 Somewhat more favorable.....2 Same opinion.....3 Somewhat worse opinion.....4 Much worse opinion.....5 (10) CHANGE OPINION VARIANCE Much less variance.....1 Somewhat less variance.....2 Same opinion.....3 Somewhat more variance.....4 Much more variance.....5
2					
3					
4					
5					
6					
7					
8					

Section C: Learning from farmers

INTERVIEWER CHECK POINT: If the respondent has never heard about Bt cotton, check this box and go to the section D ☐

(S) In the last seven years, several farmers have adopted Bt cotton. Could you tell us a little bit more about this process?

INTERVIEWER CHECKPOINT: If the respondent has never grown Bt cotton cross the box and go to (3) <input type="checkbox"/>
1. When you decided to adopt Bt cotton, how many farmers (at that time) knew of this decision?
2. (Continue 1) Of these farmers who knew of your decision to grow Bt cotton, how many (at that time) lived in the village?

Year	3. About how many farmers that you <u>knew</u> of had adopted Bt cotton in this season?	4. Of these farmers in (3), how many lived in the village at that time?	5. Of these farmers in (3), how many were your relatives?	6. On average, what was the experience of these farmers in (3) with Bt cotton <u>at the time</u> ? Very positive.....1 Somewhat positive.....2 Mixed experience.....3 Somewhat negative.....4 Very negative.....5
2007-08				
2006-07				
2005-06				
2004-05				
2003-04				
2002-03				
2001-02				

Section D: Potential information networks

Interviewer checkpoint: only to be filled in if the household is has farmed cotton in any of the last 7 years or if household plans to farm cotton in the future. If this is NOT the case, cross the box, and proceed to section X ☐

If you, today, would have a specific problem with your cotton crop who or where would you go to? Mention in order of importance.

	1. Name	2. Relationship SEE CODEBOX	3. How long have you known (1)?	4. How frequently do you talk to this person?	5. Do you expect this person to be able to help you? Yes..1; No...0; May be...2	INTERVIEWER CHECKPOINT: If this person is NOT a farmer, leave this line blank	
						6. How profitable do you think (1) is on the farm compared to your farm? SEE CODEBOX	7. How was (1)'s experience with Bt? SEE CODEBOX
1							
2							
3							
4							
5							
(2) RELATIONSHIP		Input dealer.....5		(6) PROFITABILITY COMPARISON		(7) EXPERIENCE X	
Farmer from village.....1		NGO.....6		X is much more profitable.....1		Very positive.....1	
Farmer from outside the village.....2		Government ext worker ...7		X is somewhat more profitable.....2		Somewhat positive.....2	
Relative from village.....3		Other.....specify		X is about same.....3		Mixed.....3	
Relative outside of village.....4				X is somewhat less profitable.....4		Somewhat negative.....4	
				X is much less profitable.....5		Very negative.....5	
						No experience.....NR	

X. Beliefs and Social Norms

1A. (S) In your (current) view what is the main difference between Bt cotton and non Bt cotton?												
1B. (S) In total how many labor days do you think a normal hybrid cotton crop requires per acre?												
1C. (S) Some people say that Bt cotton requires more attention and labor. How many additional labor days more/less do you think Bt cotton needs compared to a non-Bt hybrid per acre?												
1D. (S) If a standard non-Bt hybrid needs 100 labor days, how many labor days would a Bt hybrid need per acre? In other words, in percentage, how many more labor days would the Bt hybrid need?												
2. (S) Do you plan to plant cotton next season (now in June 2008)? If no or DK >> 3B												
3.A. (S) How many acres of each cultivar?												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Cultivar</th> <th style="width: 25%;">Acreage</th> <th style="width: 25%;">Row arrangement</th> </tr> </thead> <tbody> <tr><td style="height: 20px;"></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td></tr> </tbody> </table>	Cultivar	Acreage	Row arrangement									
Cultivar	Acreage	Row arrangement										
3B. How many farmers that you know of do you think will plant Bt cotton the upcoming Kharif season (June 2008)?												
3C. How many of these (in 3B) live in the village?												

Consider the following statements. Indicate each time whether you and the others agree or disagree with this statement

4. (S) Bt cotton is hazardous for animal health: they might get sick or die when they eat the fodder							
Yourself	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK	
Farmers in village	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK	
Farmers outside village	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK	
Relatives	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK	
ICRISAT	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK	
Government extension workers	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK	
NGOs	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK	
Seed dealers	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK	

5. (S) Bt cotton is hazardous for human health: if you touch it too much, you might get sick.						
Yourself	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK
Farmers in village	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK
Farmers outside village	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK
Relatives	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK
ICRISAT	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK
Government extension workers	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK
NGOs	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK
Seed dealers	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK

6. (S) Bt cotton is hazardous for the environment: it damages crops and soils						
Yourself	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK
Farmers in village	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK
Farmers outside village	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK
Relatives	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK
ICRISAT	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK
Government extension workers	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK
NGOs	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK
Seed dealers	<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly agree	<input type="checkbox"/> DK

INTERVIEWER CHECK POINT: If the respondent has never grown Bt cotton, check this

box and go to the question 8 ☐

<p>7. (S) When you first decided to grow Bt cotton, did you experience any resistance from people in your environment? Explain, from whom did you experience this resistance? Why did these people/organizations disagree?</p>

(8) The stone game

Before proceeding with the stone game, do a two out of four practice questions. Once you have done the practice questions, cross the relevant box (of the practice questions you have done) and proceed.

Weather question <input type="checkbox"/>	Draw two boxes on the whiteboard. In one of the boxes draw a sun in red. In the other box draw clouds in black (no rain). Now tell the respondent to distribute the stones according to the chances he or she thinks the sun will shine tomorrow or it will be clouded
Election results <input type="checkbox"/>	Give the names of the most common political parties. Draw boxes on the whiteboard, one per party. Then ask the respondent to distribute the stones according the likelihood is that the next chief minister will come from each one of these parties

Pass SSC <input type="checkbox"/>	Choose one of the children of the respondent between the age of 6 and 16. Make two boxes on the whiteboard, one with a smiley face, the other one with a sad face. Ask the respondent to distribute the stones according to the likelihood he thinks his daughter/son will pass/fail the exam.
Cricket <input type="checkbox"/>	Think about the next big match India will be playing. Ask the respondent to give the minimum and maximum score of that match. Make 5 boxes on the whiteboard, equally divided, between the minimum and the maximum, and ask the respondent to distribute the stones according to the likelihood these scores will arise.

(S) Ask the respondent to identify two Bt and two non-Bt cultivars he/she is most familiar with. If the respondent cannot identify enough cultivars, take the first one from the list provided and cross the box. Use these cultivars to do the following exercise.

Bt	<input type="checkbox"/>	<input type="checkbox"/>
Non –Bt	<input type="checkbox"/>	<input type="checkbox"/>

For each cultivar, first ask the respondent to determine the minimum and the maximum yield (**in quintal per acre**) on of his/her plots (owned or leased-in/shared-in) mentioned in section V. If respondent does not have any plots mentioned section V, ask the respondent to do the exercise for an imaginary field that is leveled and has an average soil quality. Then make five boxes, evenly distributed between this minimum and maximum. To calculate the width of the boxes use the following formula: $[\text{maximum} - \text{minimum}] / 5$. Draw some pictures in the boxes showing high yield and low yield. Now explain the respondent the meaning of the different boxes. Then use these five boxes to elicit a distribution from the respondent using the 20 stones. Tell the respondent to make the distribution for the conditions on one of his/her plots (owned or leased-in/shared-in) mentioned in section V. If respondent does not have any plots mentioned section V, ask the respondent to do the exercise for an imaginary field that is leveled and has an average soil quality. After the respondent has done the exercise ask him on which plot he/she would cultivate this crop (code from section V) and how much pesticide he would use (in Rs for entire season per acre), how many times he would spray and what the cost is of the seed for one acre of land. If the respondent had no plots, ask whether he imagined the crop to be irrigated.

CULTIVAR 1 (Bt): _____

Code plot	Yield	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Stones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How many times you would spray the crop? _____

And how much you would expect to spend on pesticides (Rs per season per acre)? _____

How much do you think the costs of the seed is for one acre? _____

[Only if plot code = NR: Did you imagine the crop to be irrigated Fully....1, No...0, Somewhat...2] _____

CULTIVAR 2 (Bt): _____

Code plot	Yield											
-----------	-------	--	--	--	--	--	--	--	--	--	--	--

	Stones						
--	--------	--	--	--	--	--	--

How many times you would spray the crop? _____

And how much you would expect to spend on pesticides (Rs per season per acre)? _____

How much do you think the costs of the seed is for one acre? _____

[Only if plot code = NR: Did you imagine the crop to be irrigated Fully....1, No...0, Somewhat...2] _____

CULTIVAR 3 (non-Bt): _____

Code plot	Yield											
-----------	-------	--	--	--	--	--	--	--	--	--	--	--

	Stones						
--	--------	--	--	--	--	--	--

How many times you would spray the crop? _____

And how much you would expect to spend on pesticides (Rs per season per acre)? _____

How much do you think the costs of the seed is for one acre? _____

[Only if plot code = NR: Did you imagine the crop to be irrigated Fully....1, No...0, Somewhat...2] _____

CULTIVAR 4 (non-BT): _____

Code plot	Yield											
-----------	-------	--	--	--	--	--	--	--	--	--	--	--

	Stones						
--	--------	--	--	--	--	--	--

How many times you would spray the crop? _____

And how much you would expect to spend on pesticides (Rs per season per acre)? _____

How much do you think the costs of the seed is for one acre? _____

[Only if plot code = NR: Did you imagine the crop to be irrigated Fully....1, No...0, Somewhat...2] _____

XI. Risk Experiments

INTERVIEWER CHECKPOINT: If the household is not a farming household (last 7 years)

and does not intend to farm in the future, check the box on the right and skip this question ☐

(S) The experiment consists of a series of hypothetical farming seasons. The goal of this section is to get an idea of the risk aversion of the farmers. We will use Fisher Price building blocks to represent yield distributions of cotton (in quintal per acre), and ask the farmer how much they would be willing to pay for a bag of cotton seed that gives this much quintal/acre (a bag sufficient to sow one acre of cotton).

Procedure: Place the building blocks on the white board. One block represents 5%.

- ☐ The green blocks = high yield (8 quintal)
- ☐ The yellow/purple blocks = average yield (6 quintal)
- ☐ The red blocks = low yield (4 quintal)

Make 2 trial distributions with the building blocks to learn the game. Explain the meaning of the different piles of blocks and ask the respondent how much he would be willing to pay at most for such a bag of seed. Proceed with the four experiments.

		Value (Rs)
Trial experiment 1	[100% in low yield]	
Trial experiment 2	[50% in low yield and 50% in average yield]	

		Value (Rs)
Experiment 1	[25% in low yield, 50% in average yield and 25% in high yield]	
Experiment 2	[30% in low yield, 40% in average yield and 30% in high yield]	
Experiment 3	[30% in low yield, 30% in average yield and 40% in high yield]	
Experiment 4	[10% in low yield, 55% in average yield and 35% in high yield]	