

Working Paper Questionnaire No. 6

Name of Paper: Land Degradation and Migration in a Dryland Region in India:
Understanding the Dynamics, by Amita Shah, SANDEE Working Paper No. 10-05

Abstract: Migration literature has always considered environmental constraints as one of the prime movers of populations, especially from dry regions, where water rather than land is the primary limiting factor. In this study, we seek to analyze the impact of degradation of private land, as well as common pool land resources, on migration decisions. We focus on three dryland districts in Gujarat and analyze data from a survey of over one thousand households. Our study finds that economic assets and natural capital have differential impacts on short-term and long-term migration decisions. The rich tend to partake in long-term, precautionary migration. Their assets, skills and social capital allow them to migrate out perhaps permanently. The poorest rural households in dry land regions, on the other hand, are the least likely to migrate. Thus, any employment creation in rural dryland regions is most likely to help the poorest. Further, we find that degradation of common-pool land resources influences short-term but not long-term migration. Therefore, better management of common-pool resources would strengthen the livelihood base of traditional herder communities and limit migration among middle-income households. Overall, in dry areas such as Gujarat, access to irrigation, rather than land ownership is likely to deter migration.

Date of Survey: September 2002 to February 2003

Place of Survey:

Village	Districts in Gujarat State (India)
1. Dudhai	Surendranagar
2. Susiya	Surendranagar
3. Veraval	Jamnagar
4. Dudhia	Jamnagar
5. Vaghania	Amreli
6. Liliya (Nana)	Amreli

Type of Survey:

- (i) House listing (Complete enumeration of all 1227 households in the study villages)
- (ii) Sample survey (Covering 168 households)

Number of Respondents:

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(SANDEE)

Schedule for House Listing

Gujarat Institute of Development Research
Nr. Gota Char Rasta, Gota, Ahmedabad

(Ref. Year 2000 – 01)

1. Village: _____ 2. Taluka: _____ 3. District: _____
4. Name of the Head of Household: _____ 5. Caste: _____
6. Name of the Respondent: _____
7. Total Number of Members in Household: _____
8. Type of Owned Land (Area in Acre)

S. No.	Land by Level of Quality	Area under Crop
01	Good	
02	Medium	
03	Low	
04	Uncultivated (Fallow)	
05	Total Owned Land	

Leased-in Land: _____ Leased-out Land: _____

9. Sources of Irrigation: _____
10. Area under Irrigation (2001-2002): Kharif Rabi (expected)
.....
11. Area under Main Crop by Season and Irrigation Status: (2000 - 01)
Kharif (I / UI) _____ Rabi (I / UI) _____ Summer (I / UI) _____
12. Yield of the Main Crop (for 2000 – 01) Mund (20 kg)/Acre _____
13. Yield of the Main Crop in Normal Year Mund (20 kg)/Acre _____
14. Main Sources of Income: _____
15. Estimated Income (2000-01) (Worked out on a separate sheet): _____

16. Demographic Information:

Name	Sex	Age	Educ- ation	Occupation		Whether Migrated For work Yes / No	If Yes then,				Every Year Yes / No	During Drought Yes /No	Nor. Year Yes / No
				Main	Sub		Place Of Migration	Dura- tion	Type of Work	Income			

17. Has any one of your family members migrated and settled elsewhere during the last 10 years? Yes/No_____

If Yes, since when: _____ Where: _____ Nature of Employment: _____

18. Average amount of remittance received per year during the last five years:

Cash _____ Kind _____

19. Have you undertaken any of the following measures regarding agriculture in the last 10 years?

Measures	Yes/No	If Yes, Details
Purchased Agricultural Land		
Sale of Agricultural Land		
Measures for Irrigation		
Field Bunding / Farm Pond		
Land Leveling		
Putting Silt on Top Soil		
Use of Gypsum, etc.		
Any Other		

20. Ownership of Livestock (No.):
 Cow _____ Buffalo _____ Bullock _____
 Sheep/Goat _____ Any Other _____ Total Livestock _____

21. Is your village covered under any of the watershed schemes? Yes / No _____
 Give Details: _____

22. Did you get any benefit from the scheme? Yes / No _____

If yes, Give Details:

a. Name of the Scheme: _____

b. Implementing Agency: _____

c. Benefits Received: _____

23. Have you received benefits from any other schemes for water harvesting structures?
 Yes / No _____

24. Do you use any of the following CPRs in your village? Give details.

CPR's	Yes/No	Use				
		Fodder	Fuel	Grazing	Water Drinking / Irri.	Others
Pasture Land						
Other Wasteland						
Village Pond						
Check Dam						
Other						

25. Do you face any difficulty due to migration of any of the member of your household?
 Discuss.

26. What is the impact (or outcome) of migration on your household economic status?

Remarks: _____

Investigator's Name: _____

Date: _____

Detail Schedule

Gujarat Institute of Development Research
Nr. Gota Char Rasta, Gota, Ahmedabad

(REFERENCE YEAR 2000-2001)

Head of the HHS: _____ House Listing No. _____

(01) Village: _____ (02) Taluka: _____ (03) District: _____

(04) Caste: _____ (05) Type of Migration : _____

(06) Total Land Owned: _____ (07) Total Income: _____

(08) Income 1: _____ (09) Income 2: _____ (10) Income 3: _____

(11) Income 4: _____ (12) Income 5: _____

About Credit Facility:

(13) Details About Credit Obtained during the Last 5 Years:

S.No.	Sources of Credit	Yes/ No	Year	Amount(Rs.) Amount	Outstanding	Purpose for Borrowing
01	Co-op Bank					
02	Co-op Society					
03	Friends /Relatives					
04	Money Lenders					
05	Farmer					
06	Other					

(14) Would you like to obtain credit at present? Yes/No _____

If Yes, give details: _____

(15) What kind of difficulties do you anticipate in obtaining credit?

(16) Do you wish to undertake any measures for soil water conservation (SWC)?

Yes/No/ Not Applicable _____

If Yes, give details (including estimated expenditure) _____

(16.1) Did you invest in an irrigation well in the last 10 yrs.? Y/N _____

If Yes, how did you mobilize finances for that? Give details.

(17) Details about Crops:

Name of the Crop	Season	Area	I/UI	Production	Expenditure						
					Fertilizer	Pesticide	Irri. Pump	Fuel	Wages For Hired labor	Any Other	Total
	R										
	R										
	W										
	W										
	S										

(18) Benefits Obtained from Different CPRs

No.	CPR	Benefits (Q/Year)			
		Fodder	Fuel	Water	Other
01	Pasture				
02	Other Wasteland				
03	Village Pond				
04	Checkdam				
05	Other				

(19) Would you make any changes in your migration decisions under the following conditions?

No.	Changes in Operating Environment	Changes in Migration Decisions
01	Quality of Land Improve	
	Deteriorate	
02	Area of Crop Increase	
	Decrease	
03	Irrigation Facility Increase	
	Decrease	
04	Pasture Management Improve	
	Deteriorate	

No.	Changes in Operating Environment		Changes in Migration Decisions
05	Improved Access To Credit	For Production For Consumption	
		Other	
06	Indebtedness	Increase	
		Decrease	
07	Alternative Avenues For Empl.	Within Village	
		Nearby Village	
08	Size of hhs. Labour force	Increase	
		Decrease	
09	Dependency Ratio	Increase	
		Decrease	
10	Any Other		
11	Any Other		

(Only for HHS Reporting Migration During Reference Year):

(20) Please explain whether increased empl. opp. within the village would influence your migration decisions or not.

1. Gross Income from Migration: _____

2. Expenditure during Migration: _____

3. Net income from Migration: _____

4. Remittances (Cash / Kind) _____

5. What kind of difficulties do you face during migration?

6. Other benefits (such as new contracts, information, new lifestyle, etc.) due to migration.

(21) You said that there is additional income and other benefits from migration such as _____. Against these, there would be certain expenditures / difficulties. Would you reduce/ stop migration if you get additional income within (around) village to the tune of :

No.	Particulars	Migration		Details
		Reduce	Stop	
1	Same or 20% less than the present income from Migration			
2	35% less than the present income from Migration			
3	20% more than the present income from Migration			

(Only for HHS Not Reporting Migration During Reference Year)

(22) Please give reasons for non-migration (and rank).

(A) Cannot spare a family member who is able to go out

(B) The basic (subsistence) needs are already met

(C) We have sufficient income to sustain our livelihood

(D) Life in the city is too hazardous

(D) Had tried earlier but it didn't work

(E) Can't go out due to old people/ sick people / children in the family.

(F) Don't have any contacts at the place of destination.

(23) What is the minimum amount of income you expect for having to give up a member of your family as migrant?

Rs. / Year: _____

(24) You said that at present there is no migration from your family. Assume that by having a member migrate, the family may not benefit substantially. In such a scenario, would you still like to send out a family member who may not be employed gainfully at home because you prefer some form of productive employment to idleness? Yes / No _____

Discuss: _____

(For all HHS)

(25) Do you think that you can sustain the present level of living in the next 5 or 10 years?
(No change-1, Decrease-2, Increase-3)

In the next 5 years _____ In the next 10 years _____

(25.1) If you anticipate decrease in the level, what kind of measures would you take?

No.	Measures	Yes/No	Give Details
01	Out-migration		
02	Measures for SWC		
03	Irrigation		
04	Buying New Land		
05	Leasing-in Land		
06	Buying More Livestock		
07	Selling off the land and starting business		
08	Mobilizing finances for getting job/ business for sons		
09	Any Other 1		
10	Any Other 2		

(26) Would you choose migration in order to increase income/ empl. opportunities in future?

(Yes / No)

Increase in Income: _____ Increase in empl. opportunities: _____

(26.1) If yes, please give details.

(27) Would you choose between casual work in (or around) the village or somewhat better opportunities at a distant place?

Give Details: _____

(28) Agriculture has become more risky and irrigation is also becoming scarce. In these circumstances, would you like to allocate a part of your land for supporting livestock?

Yes / No _____

(28.1) If Yes, then give details.

(28.2) If No, why not?

(29) Would you like to lease out land and go for casual work?
