ICAR–INDIAN AGRICULTURAL RESEARCH INSTITUTE
NEW DELHI, INDIA-110012

SURVEY SCHEDULE:
Climate-change induced drought impacts, adaptation and mitigation measures in semi-arid pastoral and agricultural watersheds

General Information

Village		**Name of the Investigator**	
Tehsil/Taluk		**Date of Interview**	
District/Block		**State**	

Family Details of the Household

1. Name: 2. Gender: M/F
2. Age:
3. Education: Illiterate/Literate/ (Primary/Secondary/Higher Secondary/College)
4. Family type: Nuclear/Joint/Extended
5. Family size**:**
   i. Total No. of family members: Adult (Male)…….Adult (Female)……..Children…..
   ii. No. of people engaged in farming: (a) Fully……(b) Partially……..

6. Means of livelihood

Occupation	**Yes/No**	**Annual Income (in Rs)**
Agriculture		
Agriculture + allied activities		
Agriculture+ Service		
Service		
Non-farm activities		
Agriculture + Non-farm activities		

7. What are the household's expenditures?

S.N.	**Areas**	**Expenditure (Rs)**	**Source (Savings/Loan)**
1.	Food (last month)		
2.	Agricultural investment (last year) • Machinery or wells: • Fertilizers: • Pesticides: • Labour:		
3.	Education (last year)		
4.	Health (last year)		

8. Land related Information (area in acres)

Type of Land	Irrigated	Rainfed	Source of Irrigation*	Rental Value (Rs/acre)	Soil type
Total owned land					
Leased-in					
Leased -out					
Uncultivated land					
Total					

*Open well =1, Tube well=2, Tank =3, Canal = 4, others=5

9. House ownership: Own/Joint/Rented/Lease
10. House type: Pucca/Semi pucca/ Kuchha (Area…… Value…….)
11. Electric connectivity (Yes/No)
12. Telephone connectivity (Yes/No)
13. Road connectivity (Yes/No)
14. Homestead/Kitchen garden: Yes/No (Area…… Value…….)
15. Cattle shed: Yes/No (Area…… Value…….)

16. Livestock Information:

Sl. No.	Type	Number		Present value	Income (per month in Rs)
		Local breed	Improved		
1.	Bulls				
2.	Oxen				
3.	Local cow				
4.	Improved cow				
5.	Sheep				
6.	Goat				
7.	Buffalo				
8.	Poultry				
9.	Pig				
10.	Calves				
11.	Heifers				

17. Household and farm assets:

Asset	Asset type	Total Number of assets	Value
Communication	Radio		
	Television (colour with Dish or without Dish)		
	Phone (land or cell)		
	Smart cell phone		
	Feature cell phone		
Transportation	Vehicle (car/van/jeep)		
	Motor bike		
	Bicycle		

	Jugad		
Farm tools	Cart		
	Tractor		
	Plough (wooden)		
	Plough (iron)		
	Cultivator (Tractor drawn)		
	Seeder/Weeder		
	Pesticide sprayer		
	Wheel barrow		
	Threshing machine		
	Organic manure pit		
	Diesel/Electric pump		
	Fodder cutting machine		
	Sprinkler/Drip irrigation set		
	Pipeline system		
Household items	Refrigerator		
	Water tank		
	Sewing machine		
	Electric Fan		
	Desert Cooler		
	LPG		
	Stove (Kerosene)		
	Gober gas		
	In house water connection		
	Flour mill		
	Solar lamp/cooker		
	Others (specify)		

18. Social participation

Social organization	**Member**	**Office bearer**
Farmers' club		
SHG/FIG/CIG		
Farmers' association/Cooperatives/FPCs/Water Users' Group or association		
Farmer Advisory Committee of ATMA		
Village development Committee		
Gram Sabha/ Village Panchayat		

19. Credit behaviour of farmers

Sl.No.	Source of credit	Accessibility (Easy/Difficult)	Frequency of taking loan	Purpose	Loan outstanding
a.	Moneylenders				
b.	Friends/ Relatives				
c.	SHG				
d.	Cooperatives				
e.	Bank				
f.	Others				

20. Accessibility to civic amenities

Amenities	Accessible (Yes/No)	Distance from home
Drinking water supply		
Primary Health Centre		
Primary School		
Secondary School		
College		
Post Office		
Bank		
Cooperative Society		
Mandi		
Market		
Agriculture input dealer shop		
Custom Hire Centre		
Community Centre		
Entertainment centre(theatre, cinema hall, community fair)		
KVK		
Department of Agriculture		
Soil testing lab		
Veterinary centre		
Farm machinery repair shop		
Agro-processing centre (Rice mill, pulse/oilseed mills, etc)		

21. Source of Extension Information

S.N.	Source of information	Extent of use				
		Always	Most often	Sometimes	Rarely	Never
1.	Neighbour					
2.	Progressive farmer					
3.	Relatives					
4.	Friends					

5.	Village leader					
6.	Panchayat member/ paradhan					
7.	KVK scientist					
8.	NGO/ SHG leader					
9.	Govt extension personnel					
10.	Social worker					
11.	Kissanmela					
12.	Banks					
13.	Pesticides/seed/fertilizer depot					
14.	Television					
15.	Radio					
16.	Newspaper					
17.	Mobile advisory					

22. Details of cropping pattern

Season/Crop	Variety	Area (acre)		Source of irrigation Code*	Total Production (qtls)		Quantity Sold (qtls)		Average Price (Rs/qtl)	
		Irrigated	Rainfed		Main	By pro	Main	By product	Main	By product
Kharif										
1.	Improved									
	Local									
2	Improved									
	Local									
3	Improved									
	Local									
4	Improved									
	Local									
Rabi										
1	Improved									
	Local									
2	Improved									
	Local									
3	Improved									
	Local									
Summer										
	Improved									
	Local									
	Improved									
	Local									
Annuals /Perennials										
1.										
2.										

23. Access to irrigation sources Yes/No

- Own well/Borrowed or shared from other neighboring well owners/canal/River/Community or village Pond/Lift irrigation/ Dam
- Charges for irrigation water: Rs…….per hour/acre
- Depth of water table……

2018	2012	2010	2007	2005

- How often there is conflict on water in your village?: Most Often/Sometimes/Never

- Do you have any village committee to monitor water allocation or use or for water related conflict resolution? Yes/No
- If yes, provide its name, function and mechanism.
- Do you have access or do you participate in community initiatives for water harvesting in your village/area? Yes/No

  (Farm pond/Check dam/Well/Water harvest/Community tank/Any other)

24. Climate variability/change perceptions (local indicators of climate change)

Sl.No.	**Changes**	**Over the last 10 years what changes have you noticed?** (Yes=1, No=0)	**What adaptation measures did you adopt? Choose from Adaptation code ***
1.	No changes in rain		
2.	Less rain		
3.	More rain		
4.	Frequent droughts		
5.	Frequent floods		
6.	Delay in start of rainy season		
7.	Rainy season end sooner		
8.	Unusual rain		
9.	Temperature increase		
10.	Temperatu re decrease		

*Change in crop variety=1, Decrease irrigation=2, Increase irrigation=3, Form pond construct=4, Dig new borewell=5, Stop irrigation=6, Reduce livestock=7, Keep improved livestock=8, Migration to other area=9, Lease out land=10, Purchase water=11, Plant shade trees=12, Change sowing time=13, Others=14 (specify)

25 . Access to weather information

Sources	Onset of monsoon/delay in monsoon/scanty monsoon	How frequently is forecast information available?	Did you use advice and information about when to plant/sow crops from these sources?
	Yes=1, No=O	Daily=1, Weekly=2, Monthly=3, Seasonal=4	Yes=1, No=O
KrishiVigyan Kendra			
TV			
All India Radio			
Mobile based advisory			
Community radio			
News Paper			
Neighbours/Relatives/ Lead farmer			
Gram Panchayat/Gram Sabha			
Others (specify)			

26. In the past one month, how many types of help did you provide or receive from others? Please tick

Sl. No.	Various Helps	Help given	Help received
1.	Land preparation		
2.	Planting crops		
3.	Harvesting		
4.	Looking after livestock		
5.	Attending to sick animal		
6.	Building/maintenance of house		
7.	During sickness		
8.	Borrowing money		
9.	Borrowing or providing seeds		
10.	During religious rites		
11.	During death		
12.	Buy items from markets		
13.	Writing and reading letters/applications		
14.	Mediating conflicts		
15.	During marriage		

27. In the past one season/year did you borrow (get money from others on loan) or lent (give out money on loan) money?

Sl. No.	Activities	No. of times
1.	Borrow money	
2.	Lent money	

28. If your household wanted to borrow money, whom would you approach first? Please **tick**

Sl. No	Source	Tick
1.	Relatives	
2.	Friends	
3.	Village fund (community fund)	
4.	Rural credit cooperative	
5.	Local/Private money lender	
6.	Bank	

29. In the last 12 months, how many household members in your household were ill that they had to miss work or school? (Put numbers in the appropriate box)

Sl. No	Frequency	No. of members who missed school	No. of members who missed work
1.	Never		
2.	Once or twice		
3.	Once a month		
4.	A few times a month		
5.	More than a week		
6.	More than a month		
7.	Whole year		

30. In the past one year, how many members suffered from the following diseases?

Sl. No.	Disease	Males (No.)	Females (No.)	Months of exposure (which months)
1.	Malaria			
2.	Typhoid			
3.	Cholera			
4.	Dysentery			
5.	Diarrhea			
6.	Common cold			
7.	Fever			

31. What percentage of your household food grains need is met by your own farm land in a year?

Percentage	For a year with enough rainfall	For a year with not enough rainfall
0-25%		
26-50%		
51-75%		
76-100%		

32. Please specify about daily food consumption pattern in your family

S.N.	Food items	Quantity	Value (in Rs)
i.	Foodgrains		
ii.	Pulses		
iii.	Oils		
iv.	Sugar		
v.	Meat/Chicken		
vi.	Fish		
vii.	Egg		
viii.	Milk		
ix.	Milk products (curd/Cheese)		
x.	Vegetables		
xi.	Fruits		
xii.	Processed products(Home)		
xiii.	Processed products(Purchased)		
xiv.	Tea/Coffee/Cold Drinks		

33. How often you or family members have to migrate for livelihood in times of adversaries? **Yes/No**

Place	Tick mark	Period	Tick mark
Within District		Few months	
Outside district		Six months	
Outside state		Year	

34. Have you adopted crop diversification in last few years? **Yes/No**

Diversified crop	Percent area	Reasons

35. Please specify the social/agricultural support mechanism of Govt. and Non govt. and International organizations in your area.

Scheme/ Projects	Beneficiary (Yes/No)	Nature/Extent of benefit.

36. Have you participated in any extension activity in last five years? **Yes/No**

S.N.	Extension activity	Year	Knowledge/Technology learnt
1.	Training		
2.	Demonstration		

3.	Exposure Visit		
4.	Farmers Field school		
5.	KrishakGosthi		

37. Are you aware of insurance? Yes/No
38. Have you taken any insurance policy? Yes/No
39. Are you registered under Kisan Credit Card policy? Yes/No

40. Do you have any bank account under Jan DhanYojana? Yes/No

41. What are the major constraints in adaptation to climate change?
    a.
    b.
    c.
    d.
    e.

42. What is the extent of social cohesiveness in your village?
    (Very High, High, So-So, Low, very Low)

43. What is the level of trust among the community members?

    (Very High, High, So-So, Low, very Low)

44. Does social norm in your village facilitate innovation diffusion?
    (Most often, Seldom, Never)
45. Concerning agriculture and adaptation do you feel that you are particularly lacking in certain types of information? **Yes/No**
    Tick mark the areas
    a. Weather
    b. Cropping (seeds, fertilizers, pesticides)
    c. Market, prices
    d. Health
    e. Government programmes on subsides

46. In your opinion you are among the ……of farmers to adopt any innovation in your village?
    (a) The first 1% (b) First 10% (c) First 25% (d) First 50% (e) Last 50%

SURVEY SCHEDULE PREPARED BY:

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