

Questionnaire topics & research potential of the data

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**Data Reuse on Sustainable Agricultural Development in Central Asia
(SUSADICA – Data Reuse)**

Purpose of the module

This module provides an overview of the questionnaire's main content areas and thematic focus, outlines the types of data collected, and highlights their potential applications for research and evidence-based analysis.

Farm questionnaire

- Core instrument of the **SUSADICA surveys**, designed to collect detailed **farm-level microdata**.
- Structured into **multiple thematic domains** covering farm structure, production systems, and institutional and environmental contexts.
- Implemented in **two survey rounds**, creating a **comparable, multi-country dataset** for empirical research and policy-relevant analysis.

AGRICHANGE farm questionnaire 2022

Questionnaire No.	
Interviewer's name	
Gender (circle one):	1-Male; 2-Female
Date of interview	day / / month: (January) year: 2022

Interviewer's consent: Hereby I certify that I implemented this interview by myself, strictly in accordance with the instruction, with a person who is not my relative, not a friend or neighbor who is doing a favour. Before submitting this questionnaire, I have checked for its completeness and accuracy. I pledge not to pass on the obtained information to any third parties, except from the immediate employer.

Respondent's first and last name	
Respondent's gender (circle one):	1-Male; 2-Female
Respondent's telephone number	
Respondent's telegram number	
Farm name	
Farm/enterprise address	Street/Microdistrict/MPY
Time of interview (hh:mm)	start/ /end/ /
Take GPS coordinates of the farm land location (the coordinates should be taken inside the farm field)	Latitude: / Longitude: /

Hello, my name is . I represent a research company. We carry out a survey of farms. The aim of the survey is to assess the productivity and distributional effects of farm restructuring. During next 90 minutes you will be asked several questions related to your farm. Your answers to the following questions during the interview would be greatly appreciated. All information provided will be totally confidential. Data will only be used in aggregate form. Names and details of individuals will not be released to a public authority or any other organization or to the public. Make sure that the respondent is the farm manager or a person who makes the decisions and is the most knowledgeable about the farm's activities.

0.1 What is the major specialization of your farm? [Select ONE answer]

1. Production of cotton or/and wheat	1	Go to question: 0.2
2. Production of wheat and vegetables	2	Go to question: 0.2
3. Vegetables growing	3	Go to question: 0.2
4. Melons growing	4	Go to question: 0.2
5. All mentioned crops above	5	Go to question: 0.2
6. Livestock	6	Terminate the interview
7. Only trees and fruit gardens	7	Terminate the interview
8. Grape production	8	Terminate the interview
9. Fodder production	9	Terminate the interview
10. Apiculture, fishery, forestry, greenhouse	10	Terminate the interview

0.2 Is more than 80% of farm land irrigated?

Yes	1	Continue
No	0	Terminate the interview

0.3 Do you agree to participate in this survey?

Yes	1	Continue to Section A
No	0	Continue to 0.4 and then terminate the interview

0.4 What are the reasons for not continuing the interview? [Only ONE answer]

1. No time for participation these days	1
2. Do not want to share my business and personal information	2
3. Cannot participate due to current family problems	3
4. No answer/Do not know	4

Thematic domains



Main topics & variable groups (2019-2022) – Part 1

Section		Main variable groups	2019	2022
A	Farm Manager	Gender; year of birth; education level; agricultural education; years of agricultural experience; previous occupation; GPS coordinates of farm.	✓	✓
		Household size and composition (age/sex groups); weekly working hours on farm; off-farm employment (hours and sector).		✓
B	Land Ownership & Transactions	Farm establishment year; initial farm size; legal form; total land size; tenure type (own/lease/rent); land use categories; crop cultivation (area); non-crop business activities; land market access (lease/purchase); land-use decision autonomy; trust in courts; importance of land certificates; perceived tenure security.	✓	✓
		Share of household income from farming; ranking of four most important crops.	✓	
		Irrigated land area (ha); lease duration; participation in cooperative; crop-level harvest quantity, yield, quantity sold, price, marketing channel (for all cultivated crops).		✓
BB	Clusters & Contract Farming	Cluster membership; year joined; involvement in cluster establishment; decision autonomy to join; inputs provided by cluster; incentives received; monitoring frequency; structured contract farming participation; quality assessment and dispute mechanism.		✓
		In 2019, Contract Farming was captured only through limited participation questions in Section F (Crop Production & Marketing).		
C	Farm Manager's Behavior	Risk preference; time preference; reciprocity; willingness to punish unfair behavior.	✓	✓
		Attitudes toward increasing crop yield; subjective norms (family, neighbors, experts, authorities); perceived behavioral control (finance, inputs, water, bureaucracy); behavioral outcome expectations; intention to increase crop yield.	✓	
D	Farm Labor	Farm succession expectation; labor structure (permanent/seasonal; household/hired; months; days; female share); extension service use.	✓	✓
		Worker payment mechanisms (cash, harvest share, land allocation).	✓	
		Worker incentive types (tuition support; grazing rights; machinery use; in-kind gifts; utility coverage).		✓
E	Irrigation & Field Quality	Irrigation water source; pump use; irrigation service fees; uncultivated land area; soil fertility (bonitet); groundwater level; soil salinity; perceived risk of losing land-use rights.	✓	✓
		Irrigated land area (ha); water conflicts (upstream/downstream); irrigation governance assessment; 3 ranked reasons for uncultivated land.	✓	
		Single main reason for uncultivated land.		✓
F	Crop Production & Marketing	Crop area; harvest quantity; yield; quantity sold; sale price; marketing channel; input quantities and costs (seeds; N, P, K fertilizers; manure; pesticides; machinery; fuel; labor); electricity costs; irrigation fees; taxes; calculated revenue & profit per ha; technology adoption practices.	✓	✓
		Production decision-making authority (crop choice, irrigation, fertilizer use, sales); ranking of factors affecting farm profitability; four-crop prioritization depth.	✓	
		Sustainability practices refinement; recording of production and sales variables for all cultivated crops (not limited to 4 priority crops).		✓

Main topics & variable groups (2019-2022) – Part 2

Section		Main variable groups	2019	2022
G	Sharecropping	Detailed sharecropping arrangements (definitions; roles; crop types; cost sharing; output sharing ratios; reasons for participation; satisfaction levels; preferred partners). In 2022, Sharecropping section removed; captured via binary participation indicator in Section B (Land Ownership & Transactions).	✓	
H	Livestock Production & Marketing	Livestock stock (current and three years prior); slaughter quantity; quantity sold; average price; marketing channel; milk productivity; livestock product output (beef, mutton, poultry, milk, eggs); feed source. Horses included in livestock inventory.	✓	✓
I	Access to Information & Skills	Training participation (topic; provider; voluntary/mandatory; payment; application of knowledge); information channels (policy; prices; agronomy; loans; weather; technology).	✓	✓
J	Machinery & Equipment	Machinery ownership and quantity; cotton harvester use and constraints. Machinery market valuation; self-assessed technological level.	✓	✓
K	Water Use	Irrigation problems (main reasons); response to water scarcity; water distribution rules; monitoring arrangements. Canal repair activities; irrigation turn frequency; water conflicts. Simplified water governance structure.	✓	✓
L	Finances	Investment activities (asset type; amount; financing source); loan application and receipt; loan terms (interest; duration); collateral type; subsidies; financial management responsibility; training on loan access. Land-use rights usability as collateral.	✓	✓
M	Cooperation	Cooperation activities (irrigation; machinery; inputs; grazing; harvesting; storage; sales; credit; consulting); cooperation form; community contribution. Satisfaction with cooperation level.	✓	✓
N	Changes Over Time	Farm continuation plans; succession by children; crop substitution preferences; crop diversification question. Ranking of diversification benefits (three priorities). Experienced environmental changes; severe economic losses; self-reported health status.	✓	✓
O	ICT Use in Farm Business	Smartphone/mobile use; internet use for farm-related activities; digital banking and sales; participation in social media groups; ICT attitudes (usefulness; openness; self-efficacy; compatibility); internet connection quality; migration income; life satisfaction.		✓

Data characteristics: content

Type of data collected

Quantitative farm-level data

- Land area, irrigation coverage, soil quality
- Crop area, production, yields, and sales
- Livestock numbers and outputs
- Input use (seeds, fertilizers, water, energy)
- Production costs, revenues, and investments

Qualitative and perception-based data

- Decision-making autonomy
- Behavioral traits and attitudes
- Tenure security perceptions
- Institutional trust
- Water scarcity experiences

Data characteristics: measurement

Continuous variables

e.g., land area, output, prices, costs, income, distances

Categorical variables

ownership types, crop types, water sources, marketing channels, contract types

Binary indicators

market participation, technology adoption, program participation, access to services

Likert-scale indicators

behavioral traits, decision-making autonomy, trust, perceptions



Research potential of the SUSADICA dataset

- Productivity analysis
- Input use efficiency
- Technology adoption
- Cost–benefit evaluations

Agricultural Economics

- Contract farming and farmer outcomes
- Land tenure security and investment
- Trust and dispute resolution mechanisms
- Water governance institutions

Institutional Economics

- Credit constraints
- Collateral use (including land)
- Capital investments
- Access to subsidies

Finance & Development

Key application areas

Socio-economics

- Farmer cooperation networks
- Collective action in clusters or WUAs
- Information diffusion patterns

Environment & Climate

- Salinity and yields
- Farmer responses to water scarcity
- Drought adaptation strategies
- Climate vulnerability mapping

ICT in Agriculture

- Digital connectivity and farm performance
- Adoption of mobile-based market information systems
- Digital literacy and farm decision-making

Module 2 – Key takeaways

- **Comprehensive farm-level questionnaire** covering **economic, environmental, institutional, and behavioral** domains.
- **Multiple data formats**: continuous, categorical, binary, and Likert-scale indicators.
- **Clearly structured thematic domains** enabling **flexible analytical design**.
- **Comparable, multi-country data** suitable for **cross-sectional and longitudinal analysis**.
- **Strong potential** for **academic research** and **evidence-based analysis**.