

INSEPTION REPORT

Project Name: Strengthening Resilience of the Agriculture Sector Project (SRASP)

Assignment: Survey and Establishing of Baseline for impact evaluation

Consultant name: Matin Kholmatov

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1. Progress to-date

- Consultant has developed an overall approach to the baseline survey that was approved by the PIU and the WB
- Initial list of required data for project baseline was compiled and shared with the PIU
- Consultant undertook a field trip to Tajikistan during August 12 to September 9, to validate and better inform the proposed approach & baseline survey toolkit
- Assisted by the PIU and component & regional coordinators, consultant has made trips to Sogd and Khatlon provinces and held meetings with all key project beneficiaries (see Annex 2)
- Consultant has initiated initial baseline data collection process with the support of the PIU and has helped establish working level relationships with key expected beneficiaries and government agencies that collect data needed for the Project. (see Annex 3)
- Consultant held a post-trip de-brief with the PIU management and staff covering initial observations from the meetings held (see section 2 of this report and a slide desk for component-by-component high level observations/recommendations to be further elaborated as a result of the baselines survey to be conducted by the local survey company and analyzed by the consultant)
- Consultant has prepared initial recommendations and insights into the Project's Results framework & proposed baseline and intermediate/final targets for Project's reference, discussions and action (see excel file)
- Consultant has finalized the proposed baseline survey toolkit consisting on dehkan farm questionnaire and Focus Group interviews (seed farms and exporters) [Annex 1]

2. Summary of observations to aid project implementation and design

- **The Project may benefit from prioritizing results vs funds disbursements**

Given early progress and activities across components, the Project appears to be more concerned about funds utilization (disbursements), forced to achieve results (i.e. better disbursement) early on rather than paving the way to achieve best possible results (outcomes). For example, at present, several activities (e.g. supply of seeds) are taking place following "tested/old" schemes that did not bring much results over the last 10 years in terms of making seed farms more sustainable or resilient.

- **The Project will benefit from streamlining the decision-making process and introducing a functioning "checks & balances" system for key decisions**

From early observations and discussions with Beneficiaries, the decision-making process is failing the Project and may result in missed opportunities or wrong decisions that will be harmful to Project's reputation. Proper (read clear) "checks & balances" system in the decision-making process needs to be introduced.

Example: only 32 seed farms have been selected to be part of project (only 11 multiplying wheat). The list of seed farms to receive seeds imported by the Project has been changing often, unilaterally, without proper justification or reasoning. Ultimately, over 50 “entities” have received wheat seeds in Khatlon province alone, with many not even being seed farms. Similar “fate” may be expected for cotton seeds. PIU staff needs to be consulted more, or at a very least, included in the decision-making process, along with prior no-objection for key/material issues from the World Bank, impacting Projects expected results. While “formal” structures seem to have been created, the quality of early decisions leaves much to be desired.

- **Weak activities prioritization framework & process**

While basic prioritization is taking place (mainly linked to available project funding), the key question WHY (with what purpose) certain activities should be funded by the Project is inherently missing. The logic of several activities to be funded is not adequately justified/alternatives rarely explored (e.g. why GUP Sortovoshsem needs own seed certification laboratory or packing vs ensuring seeds farms themselves have this capacity, esp. considering that GUP rarely “physically” touches the seeds and there is a formal seed certification process that is in place); or why Niholparvar or other R&D institutions need to own heavy agricultural machinery for the small area under nurseries and many more)

- **Project’s development objectives and intermediate indicators will benefit from a critical review and discussion with all parties concerned**

As presented (developed > 2 years ago), Project’s PDOs and IRI need revision to account for better link to expected project outcomes (vs outputs), especially considering Project’s visibility and amount of funds to be committed. PDOs and IRI miss a critical opportunity to structurally improve resilience of agriculture as stated and/or tend to focus on supplying inputs and limiting to outputs (see proposed PDO/IRI revision justification/evidence and suggestions)

Potential next steps:

1. Review and discuss proposed revision internally
2. Arrange a call with international consultant, if/as needed

- **Excessive focus on construction/repairs of state infrastructure**

The project, should the plans be implemented as they currently are, has a high risk of becoming a project aimed at “rehabilitating state property/construction” to beneficiaries. Also, the project is expected to construct/rehabilitate a lot of sites without proper internal staff to undertake and manage all this construction. PIU is strongly recommended to ensure proper staffing for construction (including hiring regional staff) and, more importantly, ensure a clear framework for construction activity prioritization is developed (e.g. a few beneficiaries stated they will be moving from the building scheduled to be repaired), or at least synch with ongoing capex/investment program by beneficiaries to ensure proper co-sharing of costs (which does not seem to have take place). The project should focus only on all “new” construction (such as a network of ALCs, new laboratories, and a digital center). All other infrastructure should undergo a proper screening/justification to be included (including prior) independent assessment of cost) before being included as part of project. Worth highlighting, it will be important to empower PIU to successfully merge construction/rehabilitation with clear commitment from the beneficiaries to: (i) allow access to

needed M&E data, (ii) have a clear accountability for expected results (have a MoU signed committing Beneficiaries to agreed expected results (or develop such plans with the PIU) based on prior sector/analytical work (see next point)

Potential next steps:

1. Finalize & focus efforts on the core list of new construction that the project needs to fund & no other funding is available (e.g. ALC)
2. Develop a clear screening tool (criteria) for all other ancillary infrastructure (from the long list of sites already received) to be included in the project (including reviewing 2022-23-24 planned capital expenditure plans from the state budget)
3. Draft implementation plan and synchronize execution (from timing perspective) given current/expected PIU capacity

- **Prior analytical work and focus on structural change (or project component linkages) and sustainability of Beneficiaries is notably missing**

The Project will benefit from hiring independent (local) experts (practitioners) across key project components and from undertaking sectoral/targeted thematic work (at least SWOT type analysis) highlighting key risks, gaps, opportunities and strategic directions that the Project should be addressing (e.g., making seed farms sustainable, state system of seed distribution and operation of Seed fund, locust management and sustainability, and many more). This work should be the foundation for actual activities of the project and will be key in enabling project to be effective and efficient in achieving its PDOs and IRIs

One immediate gap is a lack of financial analysis of beneficiaries (prior to interventions) and any discussion how to ensure sustainability of Project-funded interventions (e.g., effectiveness of state Seed fund, or ways to insure sustainability of Locust Expedition, local R&D institutions etc). Undertaking financial review and developing sustainability options might be beneficial to both the beneficiaries and the PIU.

Potential next steps:

1. Draft a list of needed sector/thematic papers (across key areas) to help PIU see through short-term activities and focus on developing a clear road map to reach mid/longer term results
- **PIU is having difficulties getting the right data for M&E purposes and may be challenged in the future in terms of accessing needed data to adequately assess impact/results.** PIU will benefit from ensuring that the issue of access to data or introduction of processes to collect the right data for project (and ultimately for the MoA and beneficiaries) is firmly featured in all contacts/agreements/memorandums with each Project Beneficiary. This will help both with progress tracking, beneficiaries and MoA. For example, the Project should expand coverage of data to all seed farms not only project selected e.g., have all seed farms supplied with laptop/tablet to help facilitate proper data collection and transfer of data (in specified format); or ALC to have a mandatory client and sales tracking system, GUP Sortovochsem has a proper client/seed tracking process, and many more. Beneficiaries do collect a lot of data, however most of the data in in paper form or poorly “digitized” making data collection difficult. Part of any assignment

with beneficiaries could be a section around better data management (review of processes, format, collection, analysis and developing recommendations for better data management)

- **Need for PIU staff capacity building is quite apparent**

While PIU has, admittedly, done a very good job attracting good quality staff, there is a general lack of understanding what the project is expected to achieve and how. Perhaps a series of *ongoing sessions* on expected results with PIU staff will be beneficial. Specifically, thematic session on project management, setting goals, identifying expected results, working with beneficiaries etc. More importantly, there is a need to develop PIU/Beneficiaries staff capacity building program (including individual development plans) for critical areas and ensure PIU staff participate in study tours to established ALC or countries with established AGRIDATA, countries with strong sustainable seed producing sector early on/before component implementation/design. Lack of vision and knowledge what the project needs to do could be quite detrimental to project progress. Developing/mapping staff to particular activities to ensure proper coordination of activities between staff and drafting basic flow charts for staff across key components/activities could go a long way (e.g. what and who need to be involved and at what stage in the process of supplying seeds, following a simple RACI model: Responsible (who is responsible) – Accountable (who is accountable for what task)– Consulted (who need to be consulted and when)– Inform (who needs to be informed).

Potential next steps:

- Conduct regular (monthly) touch points with senior management (PIU/MOA/WB) on the progress and alignment of plans
- Bi-weekly internal coordination meetings (for each component)
- Draft PIU wide capacity building program & provide funding (design and direct contract a local company to organize much needed study tours/capacity building across components)
- Develop a clear flow process and corresponding staff roles [who is involved at what stage for each critical project activity],. i.e. establish a transparent work flow management system that everybody can the capacity to see/monitor

- **Project is vulnerable to exchange rate fluctuation & does not have proper financial cushion**

Given inherent risks around exchange rate in Tajikistan, the Project is strongly recommended to have a proper currency hedging in place or at least have sufficient “unallocated” resources to ensure planned activities are fully implemented

3. [Results Framework and Recommendation for Project M&E system](#)

See excel file for specific details for each PDO and IRI

4. [Proposed Baseline survey toolkit](#)

See Annex 1 and also separate file with draft dehqan farm survey tool and proposed structure of semi-structured interviews (focus group meetings)

Annex 1: Draft survey tool

DRAFT SURVEY TOOL FOR DEHKAN FARMS

RESPONDENT AND INTERVIEWER INFORMATION

Good morning/afternoon. My name is _____ and I represent an agency called ____ to undertake a baseline survey for a Strengthening Resilience of Agriculture in Tajikistan

Within this project, we are conducting a survey of over 600 dehqan farms across Sogd and Khatlon provinces to gain further insights into issues of *access and quality of seeds being used by your farm, use of agro-logistical services and use and access to critical information useful for farming, like the weather, plant diseases, locust, quality of soil at your farm.* Your answers will allow the project to better assess the starting point of the Project and help monitor progress being made

In conducting the survey, we pledge to maintain complete anonymity and confidentiality of your responses. All responses will be processed and presented only in summary form.

INTERVIEWER! THE QUESTIONS IN THE QUESTIONNAIRE ARE ONLY FOR THE HOUSEHOLD HEADS OR MAJOR DECISION MAKERS. IF HE/SHE IS NOT HOME YOU SHOULD IDENTIFY AN ALTERNATIVE RESPONDENT, WHO WITH THE HELP OF OTHER HOUSEHOLD MEMBERS CAN PROVIDE INFORMATION ON ALL HOUSEHOLD MEMBERS.

	Name	Response options/Codes
Region		
District Name		
Jamoat Name		
Name of Interviewer		
Name of Supervisor		
Date of Interview (dd/mm/yyyy)	/ / 2 0	1 8
Interview Starting time (hh/mm)	:	
Interview Completion time (hh/mm)	:	
Language of Interview:	0=Tajik, 1=Uzbek, 2=Russian	
Respondent Name		
Respondent's Gender	1=Male, 2=Female	
Respondent's Role in the Household	1=Head of the household 2= Husband or wife of the head of the household 96=Other (specify)_____	

A. General dehkan farm profile

INTERVIEWER! This and all subsequent sections should cover agricultural farmland and produce sold on the market (domestics or international) NOT household plots

<p>B1. Describe the type of farm she/he owns or has a share in:</p> <p>1=Individual dehkan farm 2= Share of family dehkan farm 3 = Collective dehkan farm 4 = Agriculture or production cooperative 5 = Other corporate farm (partnership, joint company, agri-business, etc) 6 = Rent 96= Other. Specify</p>	<p>B2 What is the total area of the farm?</p> <p>_____ha (Enumerator to convert to hectares)</p> <p>0 = Less than 5 ha 1 = 5<10 2 = 10<15 3 = 15<30 4 = >30 -99. Don't know</p>	<p>B3 What type of land is it?</p> <p>1 = Annual cropland 2 = Tree cropland (orchards) (SKIP B6 and B7) 3 = Pasture (SKIP B7 and B8) 4 = Other non-agricultural land (SKIP B7 and B8)</p>	<p>B4 How many ha of this farm is irrigated?</p> <p>1. _____ha -99. Don't know</p>	<p>B5. Please describe what do you grow annually</p> <p>1. Cotton 2 Wheat 3 Potatoes 4 Corn 5. _____ Косточковые 6 Семечковые (crops) – please provide details 7 other (specify)</p>	<p>B6 Have you changed what you grow over the last 2 years?</p> <p>1. Yes (go to B7) 2.No (SKIP to C)</p>	<p>B7: Why did you switch to another crop?</p> <p>1 2 3 4</p>

B. Understanding dehkan's baseline around seeds/seedlings

Access to seeds

C1. How do you generally buy seeds/ for your farming needs?

Usually buy <u>local</u> seeds in Tajikistan	1	
Usually buy locally but seeds are Imported from outside	2	
I grow my own seeds	3	<< SKIP to C13
I usually buy directly <u>from outside</u> Tajikistan	4	<< SKIP to C3
Mix (1-3)	5	
Other (please provide details)	6	

C2 Please specify where do you purchase seeds/seedlings from?

GUP Sortovoshsem (government)	1
Seed farm	2
GUO Niholparvar	3
Private suppliers (whole sellers)	4
Private suppliers (retailers), shops	5
Other (please provide details)	6

C3 When was the last time you purchased seeds/seedlings for your farm?

I buy every year	1	
Every two years	2	
Every 3 years	3	
Mix (1-3)	4	
I do not buy seeds/seedlings	5	<< SKIP to C13
Other (please provide details)	6	

C4 How easy was it for you to buy seeds/seedlings?

Very difficult	1	
Difficult	2	
Neutral (average)	3	
Easy	4	
Very easy	5	
Other (please specify)	6	

C5 Was there enough seed from this source?

Yes	1
No	2

C6 At what time were the seeds/seedlings available?

Well before the planting seasons	1	
At the start of the planting season	2	
Mid-season	3	
Toward the end of season	4	
Seeds/seedlings are available at any time	5	
Other (please specify)	6	

C7 How far is your supplier of seeds/seedlings is located from where your farm is?

Within the same district I farm in	1	
Another district but in close proximity (same oblast)	2	
Another district but in close proximity (other oblast)	3	
Outside Tajikistan	4	
Other (please specify)	5	

C8 How did you find your seed supplier?

Recommended by my fellow farmers (word of mouth)	1	
Recommended by local government	2	
My own research	3	
Head of head of mahala	4	
Other (please specify)	5	

C9 Do you feel like you have access to sufficient variety of seeds? i.e do you have a good choice of seeds to buy from

Yes	1	
No	2	
Other (please specify)	3	

C10 Have you ever changed your seed supplier?

Yes	1	Go to 11.a
No	2	Go to 11.b

C11a Please outline the reason for your answer

YES	
Too expensive	1
Bad quality	2

C12b Please outline the reason for your answer

NO	
I have no other choice	1
I am generally happy with quality	2

Bad service	3
Other (please specify)	4

I am generally happy with cost	3
Other (please specify)	4

C12 Have you ever contacted/approached specialized seed institute for your seed needs?

Yes	1
No	2
Other (please specify)	

Farmer Preferences

C13 Faced with no restrictions, what kind of seeds you are likely to purchase at this time?

Local	1
Imported (Foreign)	2
Other (please specify)	

C14 Why do you prefer local/native seeds? (if C1=1 & 5)

Easier access	1	
Better cost	2	
Better payment arrangements	3	
Better quality	4	
Better yields	5	
Known brand	6	
Adopted to local conditions	7	
Other (please specify)	8	

C15 Why do you prefer foreign seeds? (if C1=2, 4 &5)

Easier access	1	
Better cost	2	
Better payment arrangements	3	
Better quality	4	
Better yields	5	
Known brand	6	
Adopted to local conditions	7	
Other (please specify)	8	

C16 If given a choice of buying local seeds with similar qualities as imported seeds/seedlings, would you buy them?

Yes	1
No	2
Other (please specify)	3

C17 What are the main characteristics you are checking for when buying seeds? (Respondent can select up to 3 options)

Physical attributes (Damage, purity, uniformed size)	1	
Physiological attributes (germination, vigor data etc)	2	
Genetic attributes (variety, adaptation to local conditions, pest./disease tolerance)	3	
Yield data	4	
Source of seeds (local/imported)	5	
Type of seed (elita-R1-3)	6	
Storability (moisture, seed treatment if was fumigated etc)	7	
Other (please specify)	8	

Quality & purchase process

C18 Have you been provided with any information about the quality of the seeds/seedlings at the time of purchase?

Yes	1	
No	2	
Not sure	3	

C19 Please outline what kind of information/aspects of seed quality you've been provided with at the time of the purchase?

	Yes	No	Do not know
Purity	1	2	3
Moisture	1	2	3
Viability	1	2	3
Vigor	1	2	3
Physical condition (damage)	1	2	3
Certificate of quality	1	2	3
Germination data	1	2	3
climate resistance characteristics	1	2	3
pest/drought resistance characteristics	1	2	3
Zoned/adapted to local conditions	1	2	3
Other (please specify)			

C20 Do you feel that you have been provided with sufficient information about the quality of the seeds/seedlings at purchase?

Yes (please specify what info)	1
No	2
Do not know	3

C21 What aspect of seed quality you are most concerned about when purchasing seeds? (choose 1)

Physical attributes (Damage, purity, uniformed size)	1
Physiological attributes (germination, vigor data etc)	2
Genetic attributes (variety, adaptation to local conditions, pest./disease tolerance)	3
Storability (moisture, seed treatment if was fumigated etc)	
Expected Yield	4
climate resistance characteristics	5
pest/drought resistance characteristics	6
Other (specify)	7

C22 Rate each aspect of seed quality in terms of importance to you ?

	Not important	Neutral	Somewhat important	Very important	Not sure
Physical attributes (Damage, purity, uniformed size)					
Physiological attributes (germination, vigor data etc)					
Genetic attributes (variety, adaptation to local conditions, pest./disease tolerance)					
Storability (moisture, seed treatment if was fumigated etc)					
Expected Yield					
climate resistance characteristics					
pest/drought resistance characteristics					
Formal certification					

C23 Have you ever been not satisfied with the seeds you've purchased?

Yes (please provide details)	1
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No	2
Not sure	3

C24 For the seeds you last purchased, did you confirm the following with the seller? (each category needs to be answered)

	Yes	No	I never asked
What reproduction of the seed (SE, E, R1,R2,R3, conditional)			
Availability of Seed/seedling certification			
If the seeds/seedlings were adopted to local agro zones			
If the seeds were fumigated			
If the seeds/seedling is Disease free			
If the seeds/seedling is Climate/drought resistant			
Origination (local or imported)			

Cost and payment arrangements

C25 How important is the cost of seed to you?

Not important	1
Neutral	2
Somewhat important	3
Very important	4
Not sure	5

C26 How did the cost of seeds trended over the last 2 years?

Getting more expensive	1
Increasing a little	2
Staying the same	3
Decreasing a little	4
Decreased a lot	5

C27 How do you feel about the cost of seeds/seedlings?

Generally affordable	1
Inexpensive compared to other agricultural inputs	2
Expensive	3
Very expensive	4
Do not know	5

C28 How did you pay for seed?

Paid in cash (full)	1
Paid partly (cash and barter produce)	2
Borrowed money to pay	3
Barter (100% in kind, with produce)	4
Did not pay (Humanitarian assistance (donors))	5
Did not pay (given by local government)	6
Did not pay (Given by financiers (cotton))	7
Other (please specify)	

Satisfaction

C29 Rate you overall satisfaction with seeds/seedlings you currently use?

Not satisfied at all	1	
Neutral	2	
Somewhat satisfied	3	
Satisfied	4	
Very satisfied	5	
Other (please specify)	6	

C30 Please rate your overall satisfaction dealing with seed supplier of your choice (applicable to both local/foreign)?

Not satisfied at all	1	
Neutral	2	
Somewhat satisfied	3	
Satisfied	4	
Very satisfied	5	
Other (please specify)	6	

C31 What do you feel would increase your satisfaction with you experience around buying and using seeds? (open ended question)

C. Understanding dehqan's baseline around current and expected use of agro-logistical services

Current landscape

D1. Are you currently using any of the agro-logistical services?

Yes (please provide details)	1	
No	2	<< SKIP to D6

D2 Please indicate what kind of services have you used most recently?

	Yes	No
Storage (no refrigeration)	1	2
Storage with refrigeration	1	2
Sorting	1	2
Packing/packaging	1	2
Transportation	1	2
Calibration	1	2
Certification	1	2
Quarantine inspection	1	2
Other (please specify)		

D3 Who provides these services to you? (separate answer for each selected service, pre-populate answers from D2, only selected services need to be answered)

Private service providers	1
Government owned agencies	2
Cooperative I am part of	3
I have my own facilities	4
Non-commercial entity	5
Other (please specify)	6

D4 Are you satisfied with the quality of services? (pre-populate answers from D2, only selected services need to be rated)

Not satisfied at all	1
Neutral	2
Somewhat satisfied	3
Satisfied	4
Very satisfied	5
Other (please specify)	6

D5 Are you satisfied with the cost of services? (pre-populate answers from D2, only selected services need to be rated)

Not satisfied at all	1	<< SKIP to D7
Neutral	2	<< SKIP to D7
Somewhat satisfied	3	<< SKIP to D7
Satisfied	4	<< SKIP to D7
Very satisfied	5	<< SKIP to D7
Other (please specify)	6	<< SKIP to D7

D6 What might be the main reason you are not using any agro-logistical services at this time?

Do not need such services	1
Such services are not available	2
Cost is too high	3
Quality not reliable	4
These services are far from me	5
I am not aware of such services being offered	6
Other (specify)	7

D7 Do you generally sell to a nearby local market(s)?

Yes	1	
No (I sell to outside markets only – export)	2	
No (I sell both domestically and export)	3	
Not applicable	4	

D8 Do you sell you produce yourself?

Yes	1
No (please specify how)	2
Not applicable	3

D9 On average, how much of the crops you gather might be getting wasted/spoils before it gets to the market (appx?)

<5%	1
5-10%	2
10-20%	3
>20%	4
Not applicable	5

D10 Do you receive any market related information about the prices for your produce?

Yes	1	
No	2	<< SKIP to D12

D11 How do you receive this information?

News	1	<< SKIP to D13
Fellow farmers	2	<< SKIP to D13
SMS	3	<< SKIP to D13
Government agencies	4	<< SKIP to D13
Private agencies	5	<< SKIP to D13
Other (specify)	6	<< SKIP to D13

D12 Would you like to receive such information?

Yes	1
No	2

D13 Have you ever exported your produce outside Tajikistan

Yes	1	
No	2	<< SKIP to D16

D14 Where did you export

Russia	1	
Kazakhstan	2	
Uzbekistan	3	
Kyrgyz Republic	4	
EU	5	
Other	6	

D15 What were the main challenges you have faced when exporting?

Certifications and regulatory requirements	1	<< SKIP to D18
Transportation	2	<< SKIP to D18
Customs	3	<< SKIP to D18
No knowledge of foreign market	4	<< SKIP to D18
Lack of support infrastructure to enable exports	5	<< SKIP to D18
Requirements set by foreign markets (difficult requirements)	6	<< SKIP to D18
Other (please specify)	7	<< SKIP to D18

D16 Have you ever thought of exporting your produce?

Yes	1	
No	2	

D17 What do you think are the main reasons preventing you from exporting?

Not enough information (please specify what kind of information)	1
I prefer to sell locally only	2
Exporting is too difficult (please specify what exactly)	3
I do not produce sufficient volume to export	4
I do not know how	5
Not enough agro-logistical services (not enough enabling infrastructure)	6
Other (specify)	7

Expectations of agro-logistical services on part of dehkan farms

D18 Do you see a need for better agro-logistical services being offered to a farm like yours?

Yes	1	
No	2	
Do not know	3	

D19 Would you use such services if they are made available you?

Yes	1	
No	2	<< SKIP to E1
Not sure	3	<< SKIP to E1

D20 What kind of service would you most likely use, if made available/accessible to you?

	Yes	No
Storage (no refrigeration)	1	2
Storage with refrigeration	1	2
Sorting	1	2
Packing/packaging	1	2
Transportation	1	2
Calibration	1	2
Washing	1	2
Drying	1	2
Processing	1	2
Other (please specify)		

D21 Who you think should be offering these services to you?

State/government agency	1
Private company	2
NGO/non-commercial agency	3
Association	4
Local hukumat	5
Private Public Partnership type agency	6
Aggregators	7
Other (please specify)	

D22 What is the main reason you think so? [open ended question, only 1 answer]

D23 How far a potential service provider should be from you/your farm?

1-5 km	1	
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5-10 km	2	
10-15 km	3	
15-25km	4	
>25km	5	

D24 Rate how important are the following aspects to you in deciding whether to use an agro-logistical facility or not?

	Not important	Somewhat important	Very important	Do not know
Ability to safely store my product (variety of products)	1	2	3	4
Ability to store quantity/volume required for me (size)	1	2	3	4
Availability of transportation services	1	2	3	4
Cost of services	1	2	3	4
Location of the facility	1	2	3	4
Ability to access at any time	1	2	3	4
Access to market information (prices)	1	2	3	4
Availability of own lab for quality controls	1	2	3	4
Ability to obtain necessary paperwork (permits, certification, quarantine)	1	2	3	4
Other (please specify)	1	2	3	4

D. Understanding dehqan’s baseline around current and expected risk management (access to & use of decision useful agrometeorological, soil quality and plant diseases data)

Relevance (of risk) & Awareness

E1 In the last 3 years, has your farm faced any of the risks outlined below *has directly affected your farm?*

	Y	N
Excessive floods		
Drought		
Strong winds		
Frost		
Hail		
Locust		
Other pests		
Plant diseases		
Soil degradation (quality of soils gets worse)		
Desertification		

E2 For each selected occurrence, what kind of trend do you expect in the future?

	Will get better	Stays the same	Will get worse
Excessive floods			
Drought			
Strong winds			
Frost			
Hail			
Locust			
Other pests			
Plant diseases			
Soil degradation (quality of soils gets worse)			
Desertification			

E3 In case of occurrence of natural disasters who do you go to seek help?

Fellow farmers	1
National government (inc. ministries and agencies)	2
Provincial Government	3

Local khukumat	4
Head of mahalla	5
International organizations	6
Other (specify)	7

E4 Considering next 5-10 years, what do you expect to be the 3 most important nature-related challenges that you expect to face?

Interviewer: ensure 3 options are selected

Excessive floods	
Drought	
Strong winds	
Frost	
Hail	
Locust	
Other pests	
Plant diseases	
Soil degradation (quality of soils gets worse)	
Desertification	
Other (please clarify)	

Baseline (current state) and preferences

Agromet data

E5 Do you currently receive any meteorological data from any of the government sources?

Interviewer note: Meteorological data include any data around current and forecasted weather data, including as precipitation, humidity, temperature, wind speed/direction, atmospheric pressure, frost etc

Yes	1	
No	2	
Do not know	3	

E6. Do you currently receive any meteorological data from sources other than the government?

Yes	1	
No	2	<< SKIP to E13
Do not know	3	<< SKIP to E13

E7 Could you please specify what kind of information do you receive?

precipitation	1
humidity	2
temperature	3
wind speed/direction	4
atmospheric pressure	5
frost	6
Other (specify)	7

E7.1 What kind of additional information you would like to receive? [open ended]

E8 How do you currently receive this info?

Local TV news	1
Local radio news	2
SMS	3
Email	4
Newspaper	5
Local khukumat bulletins	7
Specialized weather websites	8
Other (please specify)	9

E8.1 How you would prefer to receive meteorological information? (select 1 preferred option)

Local TV news	1
Local radio news	2
SMS	3

Email	4
Newspaper	5
Local khukumat bulletins	6
Specialized weather websites	7
Other (please specify)	8

E9 How timely do you receive this info?

Not timely at all (with long delays)	1
Somewhat timely	2
Timely	3
Well in advance	4
Other (please specify)	5

E10. How useful do you find this information?

Not useful at all	1
Neutral	2
Somewhat Useful	3
Useful	4
Very useful	5
Other (please specify)	6

E11 How do you use this info?

Interviewer note: record all options selected by the interviewer

Helps with farm practices (plant growth and development, pruning, thinning)	1
Helps select right dates for sowing	2
Helps with better use of fertilizers	3
Helps determine harvest time	4
Helps with pest/disease control & management	5
Helps with soil monitoring	6
Other (please specify)	7

E12 How reliable this information in your opinion (do you trust this info)?

Not reliable at all	1	<< SKIP to E16
Somewhat reliable	2	<< SKIP to E16
Neutral (no specific opinion)	3	<< SKIP to E16
Reliable	4	<< SKIP to E16
Very reliable	5	<< SKIP to E16

E13 Would you like to receive meteorological information in the future?

Yes	1	
No	2	<< SKIP to E16
Do not know	3	

E14 How you would like to receive such information

Local TV news	1
Local radio news	2
SMS	3
Email	4
Newspaper	5
Local khukumat bulletins	7
Specialized weather websites	8
Other (please specify)	9

E15 Who you would like to receive this information from?

Government	1
Local khukumat	2
Specialized agencies	3
International sources	4
Other (please specify)	5

E16. How concerned are you with the quality of soil?

Very concerned	1
Concerned somewhat	2
Neutral	3
Not concerned	4
Other (please specify)	5

E17 Have you ever received information about the quality of the soil on your farm?

Yes	1
No	2

Do not know	3
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E18 Have you ever conducted a soil testing for your land?

Yes	1	
No	2	<< SKIP to E25
Do not know	3	<< SKIP to E25

E19 When did you last conduct a soil test?

2022 (this year)	1
2021 (last year)	2
2020 (2 years ago)	3
2019 (3 years ago)	4
< 2019 (More than 3 years ago)	5

E20 Where did you conduct soil test?

Soil testing institute (main office)	1
Soil testing institute (local office)_	2
Private lab	3
Lab outside Tajikistan	4
Other (please specify)	5

E21 What did you use soil test for?

To meet regulatory requirements (e.g. permitting, certification)	1
For my own general knowledge	2
To determine the level of nutrients in a soil	3
To determine amount/type of fertilizers to use	4
No particular reason	5
Other (please specify)	6

E22 Did you receive recommendations on how to improve the quality of your farm's soil?

Yes	1
No	2
Do not know	3

E23 Did you find the results of the soil test useful?

Not useful at all	1
-------------------	---

Neutral	2
Somewhat Useful	3
Useful	4
Very useful	5
Other (please specify)	6

E24 What kind of additional information about soil quality you would like to receive/your will find useful? [open ended] << SKIP to E28

E 25 Would you like obtain information about the quality of soil on your farm in the future?

Yes	1	
No	2	<< SKIP to E27
Do not know	3	

E 26 What might have prevented you from requesting a soil quality testing for your farm?

I do not know where to go	1	<< SKIP to E28
Lab is too far	2	<< SKIP to E28
The cost is too high	3	<< SKIP to E28
I do not trust the results of the soil quality test	4	<< SKIP to E28
Other (please specify)	5	<< SKIP to E28

E27 What are the reasons for not wanting to do soil quality test?

Do not see a value of the test	1	
I do not know how to use it	2	
Soil quality at my farm is good enough	3	
I do not trust the results of the soil quality test	4	
I do not know what is a soil test & why it is important	5	
Other (please specify)	6	

E28 What soil fertility techniques you might have used in the past or use currently?

Conservation tillage	1
Cover crops	2
Compost	3
Manure	4
Crop rotation	5
Other (please specify)	6

Vulnerability and Response capability of farmers

E29. Please rate your vulnerability to the following risks?

	Very vulnerable	Vulnerable	Neutral	Not vulnerable
floods	1	2	3	4
Drought	1	2	3	4
strong winds	1	2	3	4
Hail	1	2	3	4
locust	1	2	3	4
Other pests	1	2	3	4
Plant diseases	1	2	3	4
Soil degradation	1	2	3	4

E30: Please rate how ready do you think you are to face the following risks

	Not ready	Somewhat ready	Ready	Do not know
floods	1	2	3	4
Drought	1	2	3	4
strong winds	1	2	3	4
Hail	1	2	3	4
locust	1	2	3	4
Other pests	1	2	3	4
Plant diseases	1	2	3	4
Soil degradation	1	2	3	4

E31 Which of the following have you been implementing in the last 5 years for your farm to strengthen your resilience and response capacity?

Maintained financial savings (contingency) for hard times	1
Invested in farm-level infrastructure & technologies (e.g. irrigation or hail nets) to control potential environmental risks	2
Implemented measures to prevent pests or diseases (e.g. strict hygiene, treatment rules)	3
Had an off-farm job (either myself or a family member)/income diversification	4
Cooperated with fellow farmers	5
Diversified crops	6
Adopted conservation farming practices	7
Cooperated with government	8
Did nothing	9
Other (please specify)	10

E32 Do you have an individual risk reduction plan?

Yes	1
No	2

E33 Are you aware of any community/jamoat/ disaster risk reduction plans/programs?

Yes	1
No	2

E34 What, in your view, would help you feel that you are more resilient in the face of risks faced by your farm?

Market Information	1
Training and Awareness on how to identify and address risk	2
Weather and climate information (including early warning systems)	3
Knowledge transfer and extension services	4
Greater financial stability	
Timely access to equipment	5
Other (please specify)	6

E35 Please provide further details what specifically would help you?

Interviewer note: prob for details for the category chosen by the respondent (e.g. what kind of market information etc, what services)

Focus group: Seed farms

Semi-structured interview questionnaire

- a. Explain the purpose and the structure of interviews, every participant provides answer to each question (or confirms the same answer), and highlight a story (situation)
- b. Profile (basic profile of seed farms should already be available at the PIU, local company to study and come prepared)
- c. Key questions (guidance for interviewers on key “components” of each question is provided below)
 1. Please outline current process of buying seeds for the needs of your seed multiplication farm & discuss what works and what do you see as key challenge
 2. Please outline current process of selling seeds & discuss what works and what do you see as key challenge
 3. Please discuss seed multiplication practices & discuss challenges for you now and in the future?
 4. Please discuss administrative processes in place & highlight what do you see as key challenges for you now and in the future?

Guidance notes:

For question 1: Insights into seed buying practices and challenges

Goal: Need to get to a clear flow chart how seed farms buy seed and why practices are as they are (probe with follow-up question)

What is purchased & decision drivers

- What kind? (super elita, elita or reproduction)
- What drives your decision what type to buy (cost, quality, etc?)
- Has it always been like that? have these trends change/why?

Frequency & decision drivers

- How often do you buy seeds?
- Why this frequency?
- What drives the decision when to buy?

Source of seeds & decision drivers

- Who do you buy seeds from (source)? domestic/foreign, state/private/international organization
- What drives your decision where to buy from & from whom?

Payment arrangement

- How do you pay?
- What are the usual arrangements?
- What influences this payment arrangements?

Seed life cycle

- See below table/example
- Explain what drives these proportions?

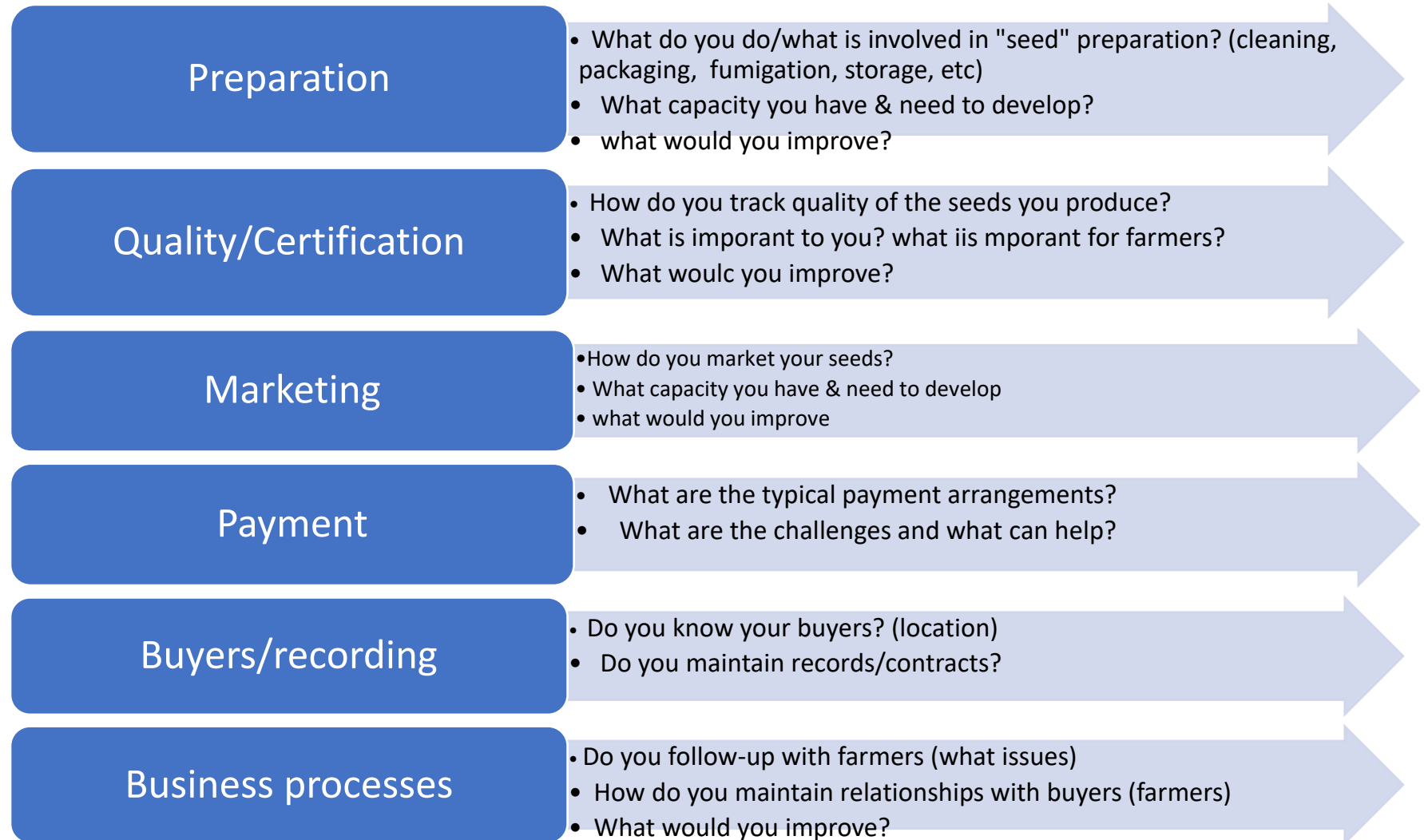
Understand seed life cycle:

- Could you outline in proportions how much you buy/plant/save for next crops/sell as seeds/sell as forage (see example below)

Total buy (tn)	Total planted	Of total seed produced	Sell as seeds (tn)	Sell as forage	Save for next planting season (tn)
Ex. 20tn	15tn	150tn	100tn	30tn	20tn
In %	75% (15/20)		66% (100/150)	20% (30/150)	14% (20/15)

For question 2: Insights into seed selling practices and challenges

Goal: Need to have insights into how seed farms sell seeds, process and challenges around it



For question 3: Operational (seed farming) practices and sustainability

Capacity to multiply

- what are the key capacities do you have and what is missing?
- what has worked in the past and what did not?
- what capacities you think you need to strengthen?

Risk management

- What risks do you track? (quality, climate, infrastructure, pest, inputs)
- How do you manage them?
- do you have/thjink you need a risk managment plan?

Knowledge

- What knowledge do you have?
- What knowledge do you need?
- How do you learn?

Partnership

- Have you ever worked wiuth any of the seed authors/ institutes?
- What kind of partnerships do you have? why/explain

Sustainability

- Would you say you have sustainable seed mutliplication business? why?
- What has been the largest challenge in seed multiplication
- What would help you become sustainable?

For question 4: Administrative process and Sustainability

Strategy

- Do you have a strategy?
- how do you define and track you annual/long term plans?

Staff and capacity

- who is working, how many people, how they are hiring (selecting), turnover?
- what are the key challenges with HR/Staff management?
- what have you done to address this?

Record keeping & filing

- What kind of information do you track on a regular basis? (focus on operational data not financial)? how difficult/onerous is it? (fertilizers, pesticides, water, yields, field utilization rates,
- Who do you report to? (explain, details)
- In what form do you report (paper vs electronic)? explain process
- where do you keep keep/store data
- how would you improve record keeping?

Sustainability

- would you say you are a resilient (strong) organization? why?
- what are the main challenges for you as an organization?
- what might have you done to help your farm to be more sustainable

Finance & compliance

- How do you define/calculate profitability of your seed farm?
- how difficult/challenging financial reporting for you?
- Who/how often you are being inspected/audited?
- how do you cope with financial reporting burden?
- how can this process be improved?

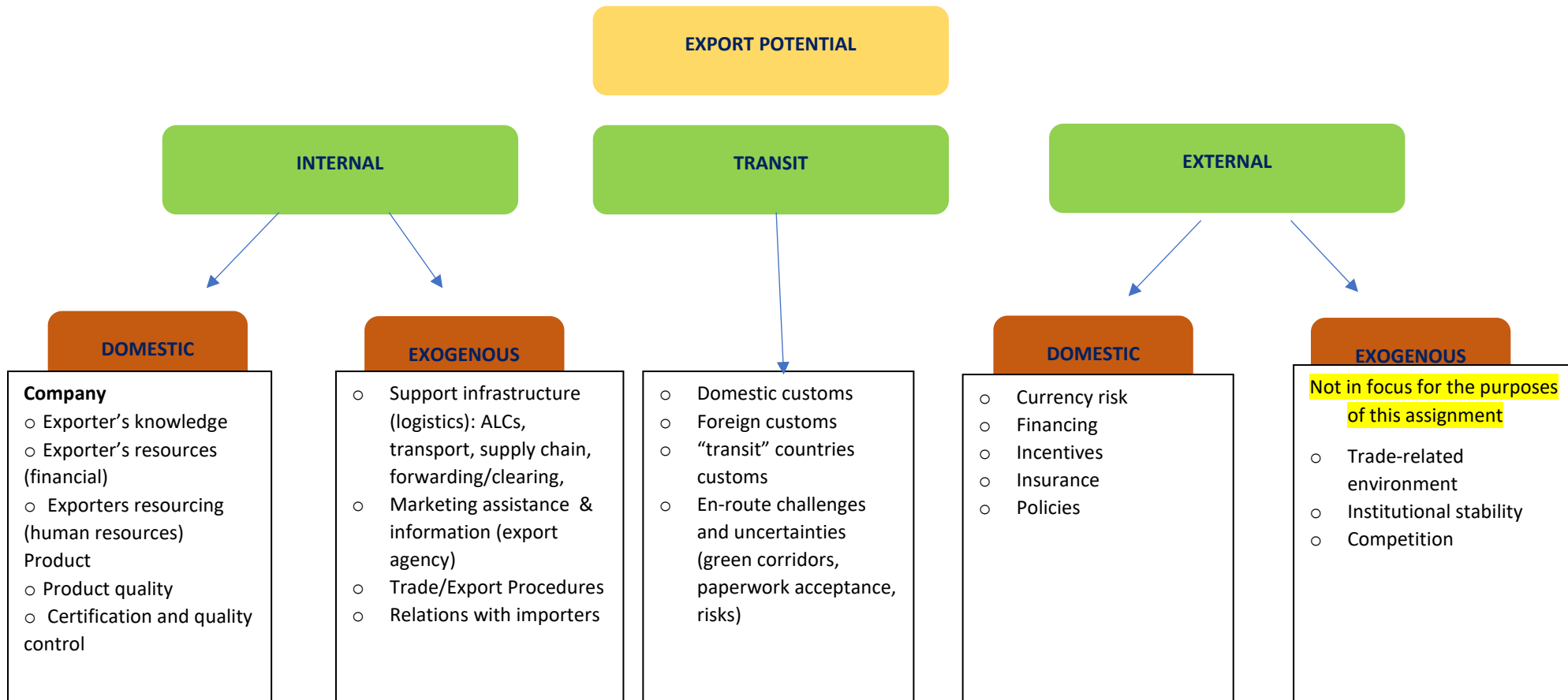
Existing infrastructure (capability)

- what kind of infrastructure (facilities/labs/equipment) do you have?
- what kind of infrastructure may help you manage seed farm better?
- do you have computers/internet

Focus group: Agricultural exporters

Semi-structured interview questionnaire

- A. Explain the purpose and the structure of interviews, every participant provides answer to each question
- B. Profile (basic profile of exporter)
- C. Key questions (guidance for interviewers on key “components” of each question is provided below)



For profile: the following basic information needs to be collected

- I. what is being exported
- II. Location
- III. Experience with exporting (in number of years)
- IV. Ownership (local, with foreign, JV, support from international organizations)
- V. Gender of respondent
- VI. Position within company (manager, farm manager, marketing/production managers, etc)

Core questions:

1. Looking inside your export business, what would you say are the key internal challenges/difficulties you are faced with as a company & why? (examples)
(Note: this is a catch all question to start the conversation about internal [domestic] issues. See below for guideposts)
2. Looking **outside your business**, what would help you be successful in export operations & why? (examples)
(Note: this is a catch all question to start the conversation about internal [exogenous] issues. See below for guideposts)
3. What kind of issues/challenges/risk have you faced **when your “product” is in transition** and what can help you mitigate risks?
(Note: this is a catch all question to start the conversation about transit-related issues. See below for guideposts)
4. Looking at **external environment** (foreign exchange, insurance etc) **how do cope with this risk** now and do you find them important to your business? what could be done about them?

Internal (domestic)

- Please discuss what are the most important points that have helped you **accumulate knowledge** in export operations
- How important is **financial health (resources)** to your export operations and where do resource usually come from (own/external et?)
- Please discuss **human resources** involved in your export operations and how do you develop them?
- How do you identify **what and where to export**?
- How do you ensure that the **quality of your product** match what is required by the "clients"
- How do you **search for clients**? what tools do you use?

Internal (exogenous)

- Describe "**export**" **infrastructure you currently use** (have developed)? (how do you export/whose services are used)
- How could an **ideal "infrastructure"** (agro-logistical center) that helps you successfull export look like and why? (what services and capabilities)
- Who should offer such services (state or private sector)?
- How do you receive needed information? how difficult you find this process? what help you may need?
- Discuss how the domestic **trade/export procedures** (tools) that help/not help with exporting (need to know at least generally proceduies involved) (focus on quaranti, customs, transport, paperwork, and process aroudn it)
- How do you establish/**maintain relationships** with potential clients? do you need help in this area?

Transit

- what risks/situation have you faced when your produce was in transit?
- how do you mitigate against these risks?
- what procedured would be important to address to mitigate transit risks?

External (domestic)

- How do you consider these "external" risks in your export operations (insurance, currency risk, financing etc)
- Do you identify these elements as risk for your export and why?
- have you ever used any insurance? would you like to use insurance if available?
- What incentives you might have and what kind of incentives you wish you have had
- Please describe if you had had any challenges/difficulties with banking/financing export operatons?

Annex 2: List of people met

1. Abdulloeva Zarina, Laboratory of Seeds Certification, Khatlon
2. Amirbeki Timur, Head of Agriculture Department, Ministry of Agriculture, Bokhtar
3. Asozoda Nurali, President of the Academy of Sciences, Academy of Sciences
4. Begov Nusratullo, Director, GUP Sortsemovoshch, Tajikistan
5. Boboev Abdukaem, Committee on Food Security
6. Daler Kholov, Head of Laboratories, Academy of Sciences, Soil Laboratory
7. Dustmatov Daler, Director, Israfafods
8. Fatoev Bobohon, Rasuli – Hojagii Dehkoni
9. Fayziev Abdumubin, Chairman, International Association of Producers and Exporters of Agriculture Products
10. Gulomalishoeva Favziya, Seeds Department, Ministry of Agriculture
11. Hamidov Suhrob, Deputy Director, Institute of Crop Production
12. Karimzoda Sadi Gafor, Minister, Ministry of Agriculture
13. Khasan/Khusan Abasov, One Village One Product = UNDP Project – Khiloldin Sobitov, Project Manager
14. Khaydarov Abdusattor Khakimjonovich, General Director, Neksigol
15. Kodirov Jovidon, Chief Specialist, Dushanbe Hukumat – Zahirahoi Shahr GUP
16. Mansurov Akbar, Leading Specialist, Bio Kishovarz Ltd.
17. Muminov Mustafo, Head of Laboratory, Laboratory of the Food Safety Committee;
18. Narzulaev Nozim, USAID/Winrock International
19. Nozaninzoda N.B., Head; Mahmadsodik Muzamirov, Deputy, Locust Expedition
20. Odinaev Kiromidin, Accountant, Niholparvar
21. Rahmatov Hursandshoh, Chairman, Avesto – Trading Cooperative – Kobodiyon
22. Rahmonov Sorbon, Head of Department, Regional Laboratory on Sanitary and Crop Production under Food Safety Committee
23. Rakhimov Sergei, CEO, Zernovaya Kompaniya LLC
24. Sadulaev Rustam, Bokhtar Logistical Centre
25. Saidov Abduholiq, Vostok 1 – Vakhsh ALC
26. Shirinjonzoda Mahmud Shirinjon, First Deputy, Food Safety Committee under the Government of the Republic of Tajikistan;
27. Solizoda Sharifjon, Chair, Seeds Farm named after Boymatov, Konibodom
28. Staff of the Laboratory, Central Laboratory that was built by CIDA - 4 story. State Commission on variety testing of agricultural crops under Ministry of Agriculture
29. Tolibov Alif, Director of gardening and vegetable growing, Department of Biotechnology
30. Ubaidulloev Nozim, Nihol Parvar
31. Yakubi Anvar, Deputy Chairman, Sughd Region Government
32. Yusupov Shavkat, Alisher Malikovich, Director, "Sad barg" Agro shops network
33. Zuhurov Kurbonali, Director, Tojik Nihol Parvar
34. Lochin Faizullozoda, Director, GUP "center of single window" for export operations
35. Husniddin Sharofiddinov and staff of NGO Obru, agricultural forecasting
36. Behruz Firuzzoda, head of department for marketing and logistics, state agency for export promotion
37. Bahidur Nazarov, head of department for agrarian policy, and food security monitoring, MoAgriculture

Annex 3: List of data collected/being collected

Consultant, supported by the PIU staff, has shared a list of required data/stats from each beneficiary met. This data will be essential both for baseline survey and establishing an operational M&E system and help with results monitoring

Key data for the PIU staff to collect as soon as possible include the following:

1. A complete list of dehkan farms (by location and size)

Name of the farm	Province	District	Size (ha)
Farm A	Sogd	Dj Rasulov	20
Farm B	Khatlon	Dangara	10
Farm C	RRS	Hissor	15

2. A complete list of ag. Exporter (by location and produce)

exporter name	province	type of exports	Имя	контакты
Зерновая компания	Sogd	персик, аблоки, черешня, слива	Сергей Рахимов	92771 3131
B				
C				
D				

Province	No.	District	Native name	Area (sq. km)	Population	Number of Dehkan farms
Sogd	1	Mastchoh	Мастчоҳ	1000	128400	4730
Sogd	2	Bobojon Ghafurov	Бобоҷон Ғафуров	2700	380500	6789
Sogd	3	Asht	Ашт	2800	168100	5617
Sogd	4	Zafarobod	Зафаробод	400	75900	4528
Sogd	5	Spitamen	Нов	400	141600	1619
Sogd	6	Jabbor Rasulov	Ҷаббор Расулов	300	137700	2718
Sogd	8	Isfara		800	274000	12360
Sogd	7	Konibodom		800	211100	8199
Sogd	9	Istaravshan		700	273500	8847
Sogd	10	Shahrison	Шаҳристон	1100	43700	2401
Sogd	11	Devashtich	Ғонҷӣ	1600	173500	2528
Sogd	12	Panjakent		3700	303000	4371
Sogd	13	Ayni	Айни	5200	83600	1178
Sogd	14	Kuhistoni Mastchoh	Кӯҳистони Мастчоҳ	3700	25400	1119
Khatlon	28	Khuroson	Хуросон	900	116500	1432
Khatlon	29	Yovon	Ёвон	900	234600	4638
Khatlon	31	Baljuvon	Балҷувон	1300	30400	436
Khatlon	32	Khovaling	Ховалинг	1700	57900	2202
Khatlon	33	Jomi	Абдурахмони Ҷомӣ	600	175800	2962
Khatlon	34	Levakant		100	48300	124
Khatlon	35	Danghara	Данғара	2000	161000	1902
Khatlon	36	Temurmalik	Темурмалик	1000	69800	897
Khatlon	37	Mu'minobod	Мӯминобод	900	94700	4686
Khatlon	38	Kushoniyon	Кӯшонӣён	600	245900	2266
Khatlon	39	Vakhsh	Вахш	1000	199300	6022
Khatlon	40	Vose'	Восеъ	800	216500	3745
Khatlon	41	Kulob		300	214700	2164
Khatlon	42	Shamsiddin Shohin	Шамсиддин Шоҳин	2300	55500	2500
Khatlon	43	Nosiri Khusrav	Носири Хусрав	800	39300	1737
Khatlon	44	Shahrizuz	Шаҳритуз	1500	130000	2406
Khatlon	45	Qubodiyon	Қубодиён	1800	188100	2730
Khatlon	46	Dusti	Дӯстӣ	1200	117100	2859
Khatlon	47	Jayhun	Ҷайхун	1000	139000	4032
Khatlon	48	Jaloliddin Balkhi	Ҷалолиддин Балхӣ	900	201300	3185
Khatlon	49	Farkhor	Фархор	1200	170800	5276
Khatlon	50	Panj	Панҷ	900	119700	5345
Khatlon	51	Hamadoni	Ҳамадонӣ	500	148800	4505