Local government agricultural officials (extension officers) Scale-up AgroNets in Kenya

The goal of this questionnaire is to investigate:

- precise information on Greenhouse programmes and greenhouse location:
  - how many there are in the county,
  - where they are,
  - how many are still working, and how many are not working etc.
- Overall number of horticulture growers in the county, and those growing tomato, cabbage and French beans. Sub country beak down if possible
- what agricultural support programmes are active and ongoing in the county

Sampling (to be confirmed by AtoZ-TGDL)

- 11 counties targeted
- At least 3 local government officers involved in agriculture a
  - HDC: Horticulture Development Centre
  - County Agriculture officer
  - SCAOs as necessary
  - ....

Introduction

Name, date and place of participants to the interview

Provide an introduction to the project and explain the goal of the interview, as to gather critical information:

- on agricultural stakeholders and their connections among them and with farmers,
- on agriculture and horticulture sectors (size and people),
- on main programmes and initiatives in the two sectors (including promotion of greenhouses)
- and on preferences of farmers and other stakeholders,

in order to scale up the use of AgroZ NEThouses in Kenya

Methodology

The questionnaire is written in English, and with a rather standardized vocabulary. Please, adapt questions and option for answer to an understandable vocabulary for the person being interviewed. Provide explanation on unclear questions, and ask for support from TGDL (Jeremiah / Joseph) or Microfinanza Srl (Marco) if some issues prove difficult to be explained

Questions follow a logical order. Sub-questions depend of the answer on the first questions (example yes/no question, and then “if yes” and “if no” sub-questions), and often your are supposed to fill in only one of the sub-questions. Please, check it before asking the question to the interviewee

Generally speaking, do not prompt the potential answers when asking for opinion or explanation. However, try to fit the answer with one of the proposed solutions, and use the “other – explain” when something actually different is mentioned

When appropriate, use the cell on the right for comments or integrations to the questionnaire, like the “other – explain” option.

When introducing the issue on the AgroZ net house Technology, please keep some pictures with you and show them to the interviewee, when this is necessary to facilitate the discussion

The questionnaire has three sections:

- General Situation
  - Ask for a presentation of the main features of the agriculture and horticulture sectors in the county, and for identification of the main stakeholders in the country, including connections
- Greenhouses
  - Investigate the extent of use of GH in the county, checking for names, contacts and location for GH users. Ask also for comments on GH, strengths and weaknesses, and ongoing strategies for renovation
- Net Technology
  - Investigate whether net house technology is present in the county, what the opinion on that is and what aspects would drive to support or facilitation from public authorities

Index

Section 1 - GENERAL SITUATION 3

Section 2 - GREEN HOUSES 4

Section 3 – AgroZ NET HOUSE TECHNOLOGY 5

Interviewee's Name	County	Sub-county	Mobile. N
Position and function			

Section 1 - GENERAL SITUATION

Ask for a presentation of the main features of the agriculture and horticulture sectors in the county, and for identification of the main stakeholders in the country, including a mention on their importance and connections with farmers and other stakeholders

Please, take your time to properly fill question n.1.1 and 2.1

N.	Question	Answer	
1.1	What is the importance of Agriculture and horticulture in this county? Please, give information on: *Get sub-county breakdown if possible* *Ask for households' number, rather than people*	○ Overall agriculture production/revenue (in KG or KSH) ○ Overall horticulture production/revenue (in kg or KSH) ○ Share of Agriculture in GDP ○ Share of Horticulture in GDP ○ Number of farmers *(or % of the population)* ○ Number of horticulture growers (excluding flowers and fruit trees) *(or% of farmers)* ○ Number of people growing ▪ Tomato ▪ Cabbage ▪ French beans *Use % of horticulture growers, if number not available*	. ○ ..... KG or KSH ○ ..... KG or KSH ○ .....% ○ .....% ○ ..... - .....(%) ○ ..... - .....(%) ○ ..... ▪ ..... - .....(%) ▪ ..... - .....(%) ▪ ..... - .....(%)
1.2	Which are the key input suppliers in the county? Please name three, and provide a contact if possible	Name ○ ..... ○ ..... ○	Contact ○ ..... ○ ..... ○ .....
1.3	Which are the key pesticides' suppliers in the county? Please name three, and provide a contact if possible	Name ○ ..... ○ ..... ○	Contact ○ ..... ○ ..... ○ .....
1.4	Which are the key seeds suppliers in the county? Please name three, and provide a contact if possible	Name ○ ..... ○ ..... ○	Contact ○ ..... ○ ..... ○ .....
1.5	What is the main way to sell horticulture products in the county? *Thick the 2 most important methods* *Don't prompt the answer*	○ Sell to local market (village) ○ Sell to main city market ○ Sell to Nairobi's Market ○ Sell to middlemen for supermarkets (yield sold before harvesting) ○ Sell to middlemen for export ○ Sell to groups or individuals via some communication channels (phone, internet, facebook, etc..) ○ Other – Explain	.....

1.6	If the horticulture production increases, will the farmers be able to sell the extra production?	○ No, the markets is almost saturated ○ Yes, but new delivery channels have to be used ○ Yes, but this is true only for off-season production ○ Yes, there's a lack of offer compared to the demand	
1.7	Which are the key middlemen of agricultural and horticultural products? Please name three, and provide a contact if possible	Name ○ ..... ○ ..... ○	Contact ○ ..... ○ ..... ○ .....
1.8.1	• What is their influence on the local market	○ High influence: they can determine prices and most of choices by farmers ○ Medium influence: they can moderately influence some prices, and they can influence agricultural practices (like small investments made by farmers) ○ Medium/low influence: they can play a role in market choices of farmers (type of products, pesticides, etc.). They can demotivate some farmer on some products ○ Low influence: they accept the situation as it is, do not influence it	

Section 2 - GREEN HOUSES

Investigate the extent of use of GH in the county, checking for names, contacts and location for GH users. Ask also for comments on GH, strengths and weaknesses, and ongoing strategies for renovation

Please, take your time to properly answer to question 2.1

N.	Question	Answer	
2.1	Are there farmers using Green Houses? How many?	○ No ○ A few (less than 10) ○ Some of them (10-30) ○ Quite a lot (30-100) ○ A lot (more than 100)	Write the exact umber if available .....
2.1.1	• How many of them are still working?	○ .....% of all the greenhouses is still working	Write the exact number if available .....
2.1.2	• Please, beak down the number by sub-county if possible *Use the back side of the paper if necessary*	Sub-county ○ ..... ○ ..... ○ ..... ○ ..... ○ ..... *Add if necessary*	N. of GHs / N. (or%) still working ○ ..... / ..... ○ ..... / ..... ○ ..... / ..... ○ ..... / ..... ○ ..... / ..... *Add if necessary*
2.1.3	• How many of the GHs are used for flowers?	○ .....% of all the greenhouses used for floriculture	Write the exact number if available .....
2.1.3	• Please provide actual location and personal contact of growers using GH	Name ○ ..... ○ ..... ○ ..... *Add if necessary (use the back)*	Contact ○ ..... ○ ..... ○ ..... *Add if necessary (use the back)*
2.2	What's the average size of the GH?	○ 8mx15m, ○ 8mx20m, ○ 8mx30m ○ Up to 1 acre ○ More than 1 acre	

2.3	What's the usual source of GH investment?	○ Individual investment ○ Supported programme/grant (by government, county, NGOs, etc ○ Financing scheme (no bank) ○ Other – Explain	Mention who: ....
2.3.1	• If individual investment, a loan?	○ Yes ○ No	
2.3.2	• If other financing scheme	○ Covering all the investment ○ Covering part of the investment ○ At a subsidized interest rate ○ At market interest rate	
2.4	Was GH a success in the county?	○ Yes, to some extent ○ Yes, indeed ○ No	
2.4.1	• If yes, why? *Choose up to three options*	○ Better harvest: bigger quantity ○ Better harvest: better quality ○ Reduction of other costs (pesticides, manure, etc) ○ Other – explain	.....
2.4.2	• If no, why? *Mention up to three main reasons*	○ Bad return in terms of harvest ○ Too complicated to regulate temperature ○ Too complicated to regulate Humidity ○ Pest control is more difficult ○ Only the GH is not enough: drip irrigation, extension services and other input are mandatory ○ The investment is too expensive ○ The GH was not good quality: need to be repaired after less than 6 months ○ Other – explain	.....
2.5	Is there any programme to renovate GH?	○ Yes ○ No	
2.5.1	• If yes, Which one?	○ Rebuild damaged GH ○ Increase extension services for GH users ○ Change GH into tunnels ○ Other - Explain	.....

Section 3 – AgroZ NET HOUSE TECHNOLOGY

Investigate whether net house technology is present in the county, what the opinion is and what aspects would drive to support or facilitation from public authorities

N.	Question	Answer	
3.1	Do you know the net house technology?	○ No ○ Yes, not well ○ Yes, very well	
3.2	Are there farmers using the Nets in the county?	○ Yes ○ No	
3.2.1	• If yes, how many?	○ A few (less than 10) ○ Some of them (10-30) ○ Quite a lot (30-100) ○ A lot (more than 100)	
3.3	Would you recommend using Nets?	○ No ○ Yes	*Please, provide pictures to show what a net house is*

3.3.1	• If yes, under which conditions?	○ At any conditions ○ only if the investment is subsidized ○ only if other extension services are granted ○ other - explain	.....
3.4	What would be an appropriate size for protected cultivation, in your opinion?	○ 5mx10m ○ 8mx15m, ○ 8mx20m, ○ 8mx30m ○ Up to 1 acre ○ More than 1 acre	
3.5	What would be an acceptable investment for a farmer?	○ Less than 100.000 KSH ○ 100-150.000 KSH ○ 150-200.000 KSH ○ More than 200.000 KSH	
3.6	What are the necessary services to be included in order to make a GH or net investment?	○ Drip irrigation ○ Pump irrigation ○ Improved seeds/seedlings ○ Improved pesticides ○ Biological products (pesticides, compost, etc) ○ Technical assistance on growing technique ○ Soil analysis (PH and pathogens) ○ Other - explain	.....
3.7	Please, provide a free comment	.....	