$update_SNA_tech_diffusion$

Do they meet criteria	
Are you over 18?	
yes	
O no	
Do you particpate in some form of dairy livestock farming?	
yes	
no	
Survey information	
Date	
yyyy-mm-dd	
lime	
hh:mm	
Enumerator name	
Participant name	
Participant gender	
Male	
Female	
Participants Phone number	

Location of village

Use the 'detect location' button for accurate GPS coordinates

latitude (x.y°)		
longitude (x.y°)		
altitude (m)	- September 1	
accuracy (m)		
Participants home location		
Name of village		
Personal information about	the participant	
How old are you?		
Select your education level		
No formal education, can't read		
No formal education, can read		
Some primary education		
Higher than primary education		
How many dependents do you have? A dependent is a person who relies on you for fi	inancial support, e.g your children	
How many years have you been farming f	For?	

What percentage of your income comes from dairy livestock?		
How m	nany female cows do you have that have given birth at least once?	
	nuch milk do you produce, in litres, a week? not known	
How b	ig is your farm in acres?	
	0 - 0.5 ac	
	0.6 - 2.5 ac	
	Greater than 2.6 ac	
\bigcirc	Dont know	
Do you	ı make the main decisions regarding farming in your household?	
	Yes	
	No	
Is the i	main decision maker, in regards to farming, male or female?	
	Male	
	Female	
Is farm	ning your main source of income?	
	Yes	
\bigcirc	No	
Which	of the following is your main source of income?	
	Employment	
	Labour	
	Business	
	Other	
	None of the above	

Do you also get income from any of these sources:
Employment
Labour
Business
Other
None of the above
How much money would you get for a litre of milk sold to the local cooperative in KES? skip if not known
How much money would you get for a litre of milk sold at a local market in KES? skip if not known
How long does it take you, in minutes, to get to the nearest market centre in KES? skip if not known
Does your household have access to a mobile phone? yes no
Does your household have electricity?
yes
O no
Do you have regular access to the internet?
yes
no
Milk sales
The sum of the percentages in these questions cannot exceed 100
What percentge of milk that you produce do you consume at home? skip if not known

What percentage of milk that you produce do you sell to the cooperative? skip if not known
What percentage of milk that you produce do you sell at local marktes? skip if not known
Information on farmer groups
Are you a member of any farmer groups?
yes
O no
» Repeat for each group that the farmer is a member of
What is the name of the group?
What is the purpose of the group (i.e cooperative)
Do you feel that you have a positive relationship with others in this farmer group?
1- not at all
<u>2</u>
<u>4</u>
5 - very positive relationships
Can you explain why you feel like you don't have a good relationship with those in this farmer group?

Formal networks

Have you ever received information on livestock farming or training on livestock farming, from any of the following

(you ca	in select more than one)?
	Dairy Cooperative
	Farmer Field Schools
	Volunteer Farmer Trainers
	Government Extension Officers
	Non-Government Extension Officers
	NGO Projects
	Government Projects
	Television
	Radio
	Newspaper
	Other
If 'othe	r' was selected, where did you receive training / information from?
How he	elpful was the training/information you received from the dairy cooperative?
	1- very unhelpful
	2
	3
	4
	5 - very helpful
Can yo	u explain why you did not find this training/information very helpful?
How he	elpful was the training/information you received from the farmer field schools?
	1- very unhelpful
	2
	3
	4
	5 - very helpful
Can yo	u explain why you did not find this training/information very helpful?

How helpful was the training/information you received from the volunteer farmer trainer?
1- very unhelpful
_ 2
3
4
5 - very helpful
Can you explain why you did not find this training/information very helpful?
How helpful was the training/information you received from the government extension officer?
1- very unhelpful
3
4
5 - very helpful
Can you explain why you did not find this training/information very helpful?
How helpful was the training/information you received from the non-government extension officer?
1- very unhelpful
_ 2
3
4
5 - very helpful
Can you explain why you did not find this training/information very helpful?
How helpful was the training/information you received from the NGO project?
1- very unhelpful
2
3
4
5 - very helpful
Can you explain why you did not find this training/information very helpful?

now helpful was the training/information you received from the government project?
1- very unhelpful
2
3
4
5 - very helpful
Can you explain why you did not find this training/information very helpful?
How helpful was the training/information you received from the TV?
1- very unhelpful
3
4
5 - very helpful
Can you explain why you did not find this training/information very helpful?
How helpful was the training/information you received from the radio?
1- very unhelpful
2
3
4
5 - very helpful
Can you explain why you did not find this training/information very helpful?
How helpful was the training/information you received from the newspaper?
1- very unhelpful
_ 2
3
4
5 - very helpful
Can you explain why you did not find this training/information very helpful?

How helpful was the training/information you received from this source?	
1- very unhelpful	
3	
4	
5 - very helpful	
Can you explain why you did not find this training/information very helpful?	
Informal networks and relationships	
Do you feel that you have a positive relationship with others living in your village?	
1- not at all	
<u>2</u>	
<u>3</u>	
<u>4</u>	
5 - very positive relationships	
Can you explain why you feel like you don't have a good relationship with others living in your village?	
Do you have a positive relationship with your wider family members?	
yes	
O no	
Do your wider family live in the same village as you?	
yes	
O no	
How far away do your family live in minutes?	
Are you part of a relgious or spiritual community? (e.g church, mosque, temple, relgious study group) yes no	
» repeat for each religious community the participant is a member of	
What religious community are you part of?	

1

How often does your religious comm	unity meet?	
More than once a week		
Once a week		
Once every two weeks		
Once a month		
Less than once a month		
Aro you a momber of any informal fine	ance, credit or savings groups? (e.g SACCO, merry-go-round, chama)	
yes	since, credit of savings groups: (e.g sacco, merry-go-round, chama)	
no		
U 110		
» repeat for each informal finan	nce group the participant is a member of	
		1
What is the name of your finance gro	oup?	
Can you provide detail on the inform	nal finance arrangements including who else is a member, whether the savin	gs
ar for a specific purpose, how many		
Are you a member of any community-	based organisations or social / welfare groups?	
yes		
no		
» Repeat for each social/welfare member of	group or community based organisation the participant is a	
member of		1
What is the organisation / group call	ed and what is its nurnese?	1
what is the organisation / group can	ed and what is its purpose:	
Harrist Company of the Company of th		
How often does the group / organisa	tion meet?	
More than once a week		
Once a week		
Once every two weeks		
Once a month		
Less than once a month		

Use of improved feed / fodder

Read each of the information sources to the participant and tick the ones they have received information from.

lave y	ou ever received training/information about improved feeds / fodder from any of these sources?
	Dairy Cooperative
	Farmer Field Schools
	Volunteer Farmer Trainers
	Government Extension Officers
	Non-Government Extension Officers
	NGO Projects
	Government Projects
	Television
	Radio
	Newspaper
	Other farmers
	Neighbours
	Don't know
	Other
	None of these
f othe	r, where did you get the training / information on improved feeds/fodder from?
	t read the names of the improved feed/fodders below. Let the participant list the feeds/fodders they know and tick off the list below.

What types of improved feed/fodder are you aware of? List the names For this question tick any of the improved feeds the participant names on the list below. If it is not there select 'other' Napier Kakamega 1 Kakamega 2 Desho Grass Chloris **Phalaris** Guatemala Grass **Rhodes Grass** Blue Buffalo Grass Bracchiaria Maize Cow Pea Desmodium Vetch Lucerne Trifolium Medicago Pigeon Pea Lablab Sesbania Leucaena Glyricidia Calliandra Tagasate / Tree Lucerne Other Improved Napier Setaria Oats Vetiver Sorghum None Other Are you aware of any of the benefits that arise from using improved fodder / feed types? yes no

Do not read the names of the benefits below. Let the participant list the benefits they know and tick them off the list below.

What benefits are you aware of? For this question, tick any of the benefits that the participant names on the list below. If it is not there select 'other' and give details in text section Drought resistant High nutrition content Increase milk production Grows fast Easy to manage Dual purpose Ability to regrow Easy to establish Reliable High palatability Improves animal fertility Good for silage making Longer storage duration Good protein supplement Good for hay Can be intercropped Other If 'other' is selected, what other benefits occur from using improved feed/fodder? Do you use any improved feed/fodder in your daily farming practices? yes Do not read the names of the improved feed/fodders below. Let the participant list the feeds/fodders they use and tick them off the list below.

Other

	improved feed / fodder do you use? quesiton select from the list which feed/fodder the participant states that they use
roi tilis	Napier Kakamega 1
	Kakamega 2
	Desho Grass
	Chloris
	Phalaris
	Guatemala Grass
	Rhodes Grass
	Blue Buffalo Grass
	Bracchiaria
	Maize
	Cow Pea
	Desmodium
	Vetch
	Lucerne
	Trifolium
	Medicago
	Pigeon Pea
	Lablab
	Sesbania
	Leucaena
	Glyricidia
	Calliandra
	Tagasate / Tree Lucerne
	Other Improved Napier
	Setaria
	Oats
	Vetiver
	Sorghum
	None

Where did you initially get the seeds for the improved feed / fodder that you use?		
Dairy Cooperative		
Farmer Field Schools		
Volunteer Farmer Trainers		
Government Extension Officers		
Non-Government Extension Officers		
NGO Projects		
Government Projects		
Other farmers		
Stockist or Vet		
Neighbours		
Other		
If other, where did you get your seeds from?		
Would you recommend using improved feed / fodder to other farmers?		
yes		
no		
Why would you not recommend using improved feed / fodder to other farmers?		
Why do you not use improved feeds / fodder?		
Have you ever received training or information about concentrate feeds for your livestock?		
yes		

Where	did you receive the training or information from?	
	Dairy Cooperative	
	Farmer Field Schools	
	Volunteer Farmer Trainers	
	Government Extension Officers	
	Non-Government Extension Officers	
	NGO Projects	
	Government Projects	
	Television	
	Radio	
	Newspaper	
	Other farmers	
	Neighbours	
	Don't know	
	Other	
	None of these	
What o	did the training / information you received recommend that you do in regards to concentrate feeds for your ock?	
_	u use any of the information / training you received in regards to concentrate feeds in your regular livestock ng practices?	
	yes	
	no	
What i	nformation / training on concentrate feeds do you use in your daily practice?	
Why do you not use any of the information and training in your daily practice?		
Do you	u make hay or silage as part of your normal farming practice? yes	
\bigcirc	no	

Did you learn about hay or silage making from any of these sources?	
Dairy Cooperative	
Farmer Field Schools	
Volunteer Farmer Trainers	
Government Extension Officers	
Non-Government Extension Officers	
NGO Projects	
Government Projects	
Television	
Radio	
Newspaper	
Other farmers	
Neighbours	
Don't know	
Other	
None of these	
Are you aware of the benefits of hay or silage making?	
yes	
no	
Why do you not make hay or silage?	
Have you ever received training or information on how to improve your use of crop residue?	
yes	
O no	

Dairy Cooperative Farmer Field Schools Volunteer Farmer Trainers Government Extension Officers Non-Government Extension Officers NGO Projects Government Projects Television
Volunteer Farmer Trainers Government Extension Officers Non-Government Extension Officers NGO Projects Government Projects Television
Government Extension Officers Non-Government Extension Officers NGO Projects Government Projects Television
Non-Government Extension Officers NGO Projects Government Projects Television
NGO Projects Government Projects Television
Government Projects Television
Television
Radio
Newspaper
Other farmers
Neighbours
Don't know
Other
None of these
What did the training / information you received recommend that you do in regards to crop residue? Do you use any of the information / training you received in regards to crop residue in your regular livestock farming practices?
yes
no
What information / training on crop residue do you use in your daily practice?
Why do you not use any of the information and training you received on crop residue in your daily practice?
Animal health and vet information
Do you have access to a vet or animal health assistant in your village?
yes
no

Have a	ny of your livestock ever suffered from any disease or illness?
\bigcirc	yes
\bigcirc	no
Did you	ı have a vet or animal health assistant tend to them?
	yes
	no
Did you	access the vet or animal health assitant through any of the following?
	Dairy Cooperative
	Farmer Field Schools
	Volunteer Farmer Trainers
	Government Extension Officers
	Non-Government Extension Officers
	NGO Projects
	Government Projects
	Television
	Radio
	Newspaper
	Other farmers
	Neighbours
	Don't know
	Other
	None of these
If other	r, how did you access the vet?
Would	you recommned the vet or animal health care assistant to another farmer who experiences similar problems?
	yes
	no
Why would you not recommend the vet or animal health care assistant to another farmer?	
\A/I 1*	
wny die	d you not have a vet or animal health assistant attend to them?

Are you aware of the benefits that arise from vaccinating livestock?		
\bigcirc	yes	
\bigcirc	no	
Can yo	u list some of the benefits you are aware of?	
Where	did you learn about the benefits of vaccination?	
	Dairy Cooperative	
	Farmer Field Schools	
	Volunteer Farmer Trainers	
	Government Extension Officers	
	Non-Government Extension Officers	
	NGO Projects	
	Government Projects	
	Television	
	Radio	
	Newspaper	
	Other farmers	
	Neighbours	
	Don't know	
	Other	
	None of these	
Have you ever had any of your livestock vaccinated?		
	yes	
	no	

Did yo	ou get access to the vaccination / vaccination services through any of the following?	
	Dairy Cooperative	
	Farmer Field Schools	
	Volunteer Farmer Trainers	
	Government Extension Officers	
	Non-Government Extension Officers	
	NGO Projects	
	Government Projects	
	Television	
	Radio	
	Newspaper	
	Other farmers	
	Neighbours	
	Don't know	
	Other	
	None of these	
If you	have access to vaccination services, would you get your livestock vaccinated? yes	
If you		
	yes	
Why w	yes	
Why w	yes no vould you not vaccinate your livestock?	
Why w	yes no vould you not vaccinate your livestock? I you recommend getting livestock vaccinated to other farmers?	
Why w	yes no vould you not vaccinate your livestock? I you recommend getting livestock vaccinated to other farmers? yes	
Why w	yes no vould you not vaccinate your livestock? I you recommend getting livestock vaccinated to other farmers? yes no	
Why w Would Why w	yes no yould you not vaccinate your livestock? I you recommend getting livestock vaccinated to other farmers? yes no yould you not recommned getting livestock vacinated to other farmers?	o local breed cows?
Why w Would Why w	yes no vould you not vaccinate your livestock? I you recommend getting livestock vaccinated to other farmers? yes no vould you not recommned getting livestock vacinated to other farmers? eding services	o local breed cows?
Why w Would Why w	yes no vould you not vaccinate your livestock? I you recommend getting livestock vaccinated to other farmers? yes no vould you not recommned getting livestock vacinated to other farmers? eding services ou aware of the benefits that arise using improved (exotic or cross-breed) cows compared to	o local breed cows?

What percentage of your livestock are exotic or cross-breed cows?

Have you ever used any of the following to breed your cows? Multiple can be selected Artifical Insemination Hired Bull Service Own bull Did you access the AI service through any of the following Dairy Cooperative Farmer Field Schools Volunteer Farmer Trainers Government Extension Officers Non-Government Extension Officers NGO Projects **Government Projects** Television Radio Newspaper Other farmers Neighbours Don't know Other None of these If other, how did you access the A.I service? Would you recommned using A.I services to other farmers? yes Why would you not recommend Al services?

Did you access the hired bull service through any of the following?		
Dairy Cooperative		
Farmer Field Schools		
Volunteer Farmer Trainers		
Government Extension Officers		
Non-Government Extension Officers		
NGO Projects		
Government Projects		
Television		
Radio		
Newspaper		
Other farmers		
Neighbours		
Don't know		
Other		
None of these		
Would you recommend using hired bull services to other farmers?		
yes		
no		
Why would you not recommend hired bull services?		

Information transmission

If you had a question regarding dairy livestock farming, which of these would you most likely go to? You can select

muitip	DIE CONTRACTOR CONTRAC	
	Dairy Cooperative	
	Farmer Field Schools	
	Volunteer Farmer Trainers	
	Government Extension Officers	
	Non-Government Extension Officers	
	NGO Projects	
	Government Projects	
	Television	
	Radio	
	Newspaper	
	Other farmers	
	Neighbours	
	Don't know	
	Other	
	None of these	
Do yoι	u regularly discuss dairy farming informally with friends, neighbours and family etc?	
\bigcirc	yes	
	no	
Do yoι	u ever communicate with other farmers via mobile?	
	yes	
	no	
What s	sort of farming topics / issues do you discuss with other farmers over the phone?	
The individuals named in the following question may be approached to take part in this survey. Make this clear to the participants.		
Can you give the names of at least three people who you talk to about farming? Please also provide their phone number, age and the location of their homes.		