TRAINING MANUAL FOR PASTROLISTS AND AGRO-PASTROLISTS ON INDEX-BASED LIVESTOCK INSURANCE
INDEX-BASED LIVESTOCK INSURANCE
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Acknowledgements

The goal of positively transforming people’s life is both a developmental and professional issue. Writing a curriculum on Index-based Livestock Insurance to guide extension worker’s efforts to inform the pastoralists and agro-pastoralists of Northern Kenya was an effort towards achieving this noble goal. In this endeavour the consultants appreciate constant helpful directions given by Dr. Andrew Mude and Ms. Brenda Wandera of International Livestock Research Institute. We equally thank Mr. Hussein Gufu, a former policy holder from Marsabit County who gave us detailed information about the product on ground. We equally recognize the contribution of Linda Communications (design & print), John Otieno Okande (Editor), Kevin Ouma (photography) as well as Lewis Masinde (cartoonist). We thank them all.

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Introduction

Background
The recurrent drought has had devastating effects on pastoralists and agro-pastoralists in Kenya. Marsabit County located in the Northern part of Kenya, is one such region where pastoralist’s households have continuously experienced severe consequences of drought. Affected pastoralists are often forced to employ short term traditional drought coping strategies such as migrating with herds to other regions, distributing herds amongst their relatives and borrowing herds from clan members. Drought related risks often affect the entire region thus rendering traditional risk sharing arrangements insufficient. Many a times the entire livelihoods of the pastoralists are threatened since livestock which is their only source of income and food, perish in great numbers during severe drought.

It is in response to such needs and due to the absence of formal insurance in this region that International Livestock Research Institute, Equity Bank and UAP Insurance rolled out Index Based Livestock Insurance (IBLI). IBLI, just like other insurance products, compensate its clients in the event of a loss. Unlike traditional insurance which assesses losses on a case by case basis and makes payouts based on individual client’s loss realizations, IBLI offers policy holders within geographically defined areas payouts when the area based indicator is triggered.

Rationale
Introducing the Index-Based Livestock Insurance product to pastoralist communities and educating them of its benefits is challenging because the target clientele are often:

i) Generally unfamiliar with the concept of insurance
ii) Situated in remote and infrastructure deficient areas
iii) Mostly illiterate
iv) Pastoralists who are constantly moving in search of pasture for their livestock.

Consequently the mode of delivery of information about IBLI product to the pastoral communities will be through extension workers. Extension workers have been identified as the ideal way of educating the pastoralist since they are relatively literate, are part of the pastoral communities and will therefore explain the product detail.
Objectives of the training

The overall objective of IBLI training is to equip potential clients with knowledge that can help them understand and appreciate how Index-Based Livestock Insurance works so that they are able to make an informed decision in investing in insurance. The training also has the objective of sharing information and creating awareness of the IBLI product. It is expected that by the end of the training the trainees should be able to:

i) Explain clearly the key features of IBLI
ii) Describe and be able to disseminate information on IBLI purchase and compensation processes
iii) Explain the advantages derived from investing in the IBLI product.

Indicative outcomes

The expected outcome from the Index-Based Livestock Insurance training shall be as follows:

i) Increased level of awareness of IBLI product and its features
ii) Improved methods of managing drought related risks through informed decision making
iii) Increased number of IBLI policy holders.

Training Delivery

Teaching and learning methodologies
The training will employ the following teaching and learning methodologies:

- Analogies
- Demonstrations
- Group discussions
- Lectures
- Question and Answers
- Role plays
- Proverbs and sayings

Instructional materials
The training will use the following instructional materials for effective delivery:

- Cartoons
- Flips charts
- Marker pens
- Pictures, art works and other appropriate illustrations
- Quick reference guide
Instruction equipments
The training will use the following instructional equipment for effective delivery:

- Calculators
- Generator (where the electricity and solar power is unavailable)
- Laptops and LCD projectors

Modes of instruction
The mode of instruction shall be:
- Direct mode, Face-to-face, Trainer-trainee interaction

Target group

The target clients for the IBLI product are the pastoral and agro-pastoral communities. This manual is intended to equip the extension workers with tailor-made contents and methodologies to ensure that the training objectives are met.

It is recommended that the extension workers educate the target clients through village Barazas (meetings) organized by the village elders or the local chiefs. The target groups may also be accessed at the water points where a number of herders congregate during village water committee meetings. Alternatively they may be accessed through local development associations.

Evaluation

The evaluation of the training will employ 4 factor comparison technique. This technique covers all the four levels of training evaluation which includes the following:

- Reaction level
- Learning level
- Behavior level
- Impact level

Reaction and learning levels of the evaluation will be assessed immediately through end of session oral evaluations and through an objective quiz at the end of the training. Behavioral and impact levels will be evaluated at least a year after implementation of the training through a survey.
## Training structure

### Table 1: Summary of curriculum content and time allocation

<table>
<thead>
<tr>
<th>CODE</th>
<th>SESSION</th>
<th>CONTENT</th>
<th>CONTACT HOURS</th>
</tr>
</thead>
</table>
| 1.   | Traditional drought risk management methods and the concept of insurance | • Introduction to IBLI  
   • Concept of insurance  
   • Consequences of drought related livestock death  
   • Concept of Index Based Insurance  
   • Shortcomings of traditional methods of coping | 3             |
| 2.   | Risks covered and the Index                              | • The risk covered by IBLI  
   • Construction of the Index  
   • Linking livestock mortality with forage availability | 2             |
| 3.   | Contract trigger level and geographical coverage         | • Significance of the trigger point  
   • Geographical coverage of IBLI | 3             |
| 4.   | Insurable livestock Unit, contract premium and sum assured | • Insurable livestock unit  
   • Sum assured for insured livestock  
   • Premium value for insured livestock | 3             |
| 5.   | IBLI Purchase and Compensation Processes                | • IBLI purchase process  
   • IBLI compensation processes  
   • IBLI sale and compensation periods | 1             |
| 6.   | The value of IBLI to the pastoralists                    | • Benefits of IBLI to potential clients  
   • Modes of creating awareness of the IBLI to the pastoralist community  
   • Methods of accessing the potential clients | 2             |
| 7.   | End of training Evaluation                              | • End of training evaluation objective quiz                                                         | 1             |
Training Session 1

Session 1: Traditional drought risk management methods and the concept of insurance

Session Objectives
By the end of this session the trainees should be able to:
i) Describe the concept of insurance
ii) Differentiate conventional insurance from Index Based Insurance
iii) Explain the consequences of drought related livestock deaths
iv) Explain the shortcomings of traditional methods of coping with the risk of drought related livestock deaths

Methodology
Lecture
Question and answer
Proverbs

Training and Instructional and materials
Flip charts
Still picture
Tape

Time: 3 hours

Activities
i) Explanation of the concept of Insurance
ii) Differentiate conventional insurance from Index Based Livestock Insurance
iii) Explaining the shortcomings of traditional drought coping methods
Set the learning climate with the following introduction

Droughts have been a major cause of livestock losses in pastoralist regions in Kenya. Given that livestock is the main source of livelihood for pastoralists, livestock losses have depleted a significant part of pastoralist’s wealth by leaving them with no fall backs and hence exposed to greater risks (risk is uncertainty concerning the occurrence of loss).

Pose to the trainees: What are the consequences of livestock losses to pastoralists? Involve the learners in coming up with consequences of livestock losses. List them on a flip chart

The consequences include: A reduction of the ability of pastoralists to feed their families, educate their children and exposure of pastoralist communities to death etc. In the past pastoralists have tried many traditional methods of coping with the consequences of drought

Ask the trainees to come up with traditional drought coping methods and list them on a flip chart

The methods include: Migrating to other regions, taking livestock to relatives or assuming the risk.

Pose to the trainees: Do the traditional drought coping methods address the drought problem fully?

Clearly none of these methods are able to fully address the problem. Pastoralists are still left vulnerable to the severe effects of drought.

Indicate to the trainees that: As a community the pastoralists need a lasting solution to recurrent drought problem. There is a Boran saying that goes: “Man tannan wan tat hid`abdu” (if people come together to seek solution to a problem they cannot fail to find one) The Turkana have proverb: “Emuduk ilanyi akiru” (it is better to prepared early) the Rendille on the other hand have a similar saying: “aha khaptai tietah kafayo”

Ask the learners: Why is risk management important? List the responses on a flip chart
Answers include: It prepares the individuals against potential losses, ensures their survival, enhances stability of earning, and promotes growth of wealth
One solution now available to pastoralist is insurance introduce the concept of insurance using the following case of 200 herders

**A Case of 200 Herders**

*There are 200 herders each having one bull.*

*Each bull is worth Ksh.15,000.*

*Every year, 5-bulls die, on an average due to drought*

Ask the trainees:

1) **What will be the total amount of money (in Kenya shillings) of bulls lost by the herders each year?**

2) **Suppose all the 200 herders come together and contribute Ksh. 400 per year, what would be the amount of the common fund?**

Expected answers:

1) Ksh.75,000

2) Ksh.80,000

**Indicate to the trainees that:** To fulfill the loss of herders whose bulls died, the contributed fund is more than sufficient. This way, the loss of the 5 herders is distributed amongst 200 herders.

Formal insurance works this way, people who buy insurance pool their resources by contributing to an insurance fund. The fund is used to cover the cost of those who suffer the loss; however the insured is expected to bear a defined proportion of the insured risk. Individual risks are consequently reduced by spreading them among the fund contributors. Therefore insurance not only involves risk transfer but also pooling and risk reduction. Thus the risk for the group is reduced and the losses that result are pooled through the payment of an insurance premium (the price for insurance cover).

**Pose the following questions to the trainees:**

**In the case of 200 herders which figure would represent**

1) **The premium**

2) **The pooled funds**

Expected answers

1) The contribution of Ksh. 400

2) The total contribution of the entire 200 herders of Ksh 80,000

Tell the trainees that: Risk management is the process of determining the maximum acceptable level of overall risk from a proposed activity then using risk assessment techniques to determine the initial level of risk and developing a strategy to reduce the overall level of risk to an acceptable level.
Insurance on the other hand is a formal way of managing risks. Those who buy insurance always transfer a proportion of their insured risks to the insurance company in return for payment of an insurance premium which is the actual amount of money charged on an insurance contract (policy).

Indicate to trainees that: One such methods of managing drought related risks is Index–Based Livestock Insurance (IBLI).

Explain the concept of index based insurance: Index based insurance uses a suitable and measurable proxy such as forage availability or rainfall to construct an indicator or index that is highly associated with event being insured (drought related livestock deaths or crop failure respectively).

This Index then serves as the measure upon which insurance payments are, or are not, made. A pre-determined threshold level of the index, often referred to as the trigger point, marks the point at which payments begin.

For example, an index insurance contract designed to cover the risk of drought related livestock mortality would begin making indemnity payments if forage availability fell below the threshold over a defined time period, such as a year.

Index insurance is best suited for correlated risks (severe, widespread events such as droughts).

Pose to the trainees: What is the difference between conventional insurance and index based insurance? Use table 2 to explain the differences.

Table 2: Differences between conventional insurance and index bases insurance

<table>
<thead>
<tr>
<th>Conventional insurance</th>
<th>Index based insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable for independent (uncorrelated) risk such as a car accident</td>
<td>Suitable for correlate (widespread) risk such as drought</td>
</tr>
<tr>
<td>Compensation done on actual losses. The actual losses have to be assessed by claim assessors before payout is made</td>
<td>Compensation is based on the index reading for a locality such as the predicted livestock deaths for a division.</td>
</tr>
<tr>
<td>Payout process is long, cumbersome and subject to bias</td>
<td>Objective triggers and structured rules exist. When they occur payment is automatically done</td>
</tr>
<tr>
<td>Claim is slower</td>
<td>Claim is faster</td>
</tr>
<tr>
<td>Payment made to individuals according to verified individual loss</td>
<td>Payment made to all individuals within a coverage area as per the index level.</td>
</tr>
</tbody>
</table>
Pose to the trainees: Why then should the pastoralists consider using IBLI to manage livestock related deaths? Underscore the relevance of this question through a proverb.

For the Boran the proverb goes: “Fula jiitu bilachi iit mara” (literal translation - we expect butterflies to hover over a damp area) meaning- People will consider an investment if it has a potential return for the Turkana a similar proverb goes: “Nyitao ngikinyam nalup nakagongok” for the Rendille it goes: “nti rath kwaro kohani kajira”.

Expected responses include: The traditional drought coping strategies have continuously left pastoralists vulnerable to the devastating effects of recurrent drought. Unlike the traditional drought coping strategies, IBLI is expected to enable beneficiaries to:

i) Restock their livestock in the event of drought related losses
ii) Stabilize household incomes i.e. during severe droughts, households whose incomes would have otherwise been significantly reduced are cushioned by the insurance payouts.

Session Evaluation

Evaluate whether the session objectives have been met by asking your trainees the following questions:

i) What are the shortcomings of traditional drought risk management methods?
ii) How does conventional insurance work?
iii) What are the differences between conventional insurance and index based insurance?

Based on the answers clarify any misconception that may exist
Session 2: Risks covered and the index

Session Objectives
By the end of this session the trainees should be able to:

i) Clearly identify the risk covered by IBLI
ii) Explain the construction of the Index
iii) Link Livestock mortality with forage availability

Methodology
- Group discussions
- Illustrations
- Lecture
- Question and answer

Training and Instructional and materials
- Cartoons
- Forage availability satellite picture 1 and 2
- The trend on forage availability in Loiyangalani for 1 year
- Flip charts
- Tape
- Computer and LCD projector

Time: 2 hours

Activities
i) Clarification of risks covered under IBLI
ii) Explaining the construction of the index
Explain risks covered under IBLI

Tell the trainees that: IBLI insures the pastoralist against drought-related livestock deaths only. It covers cattle, camels, goats and sheep only. It is very important to indicate clearly what is covered under IBLI, and clarify that any other livestock deaths due to any other causes are not covered.

Explain the Index

Indicate to the trainees that: An index is an indicator that is associated with the event being insured. The index IBLI uses is predicted livestock mortality within a given area. This indicator is constructed from forage availability of a given division captured from satellite images. These image pictures are taken every 16 days.

Display figure 1
Use Picture 1 and 2 in figure 2 to illustrate vegetation cover as captured by satellite

Display figure 1: Forage availability satellite picture 1 and 2

![Vegetation Condition Map](image)

**Picture 1: Bad vegetation condition in Feb 2006**

- missing value
- 0 - 0.05
- 0.05 - 0.1
- 0.1 - 0.15
- 0.15 - 0.2
- 0.2 - 0.25
- 0.25 - 0.3
- 0.3 - 0.35
- 0.35 - 0.4
- 0.4 - 0.7
Explain the representation of the forage availability by the different colors

Point out that: The above satellite pictures capture the forage on the ground. As indicated on the key, the indicator of forage takes value between 0 and 1 the representation is on a continuum of colours from dark green (dense forage) to dark brown (no forage). The larger value means a better vegetation condition.

Take for instance Maikona and North Horr Divisions, in image 1 where the forage cover was quite low implying poor forage availability. Image 2 presents a contrast of the two divisions where Maikona division portraying dense forage cover than North Horr.

Stress to the trainees that: The level of forage determines the productivity and health of livestock which in turn directly affects the mortality of livestock. The prediction of livestock mortality is done after monitoring the forage availability for at least twelve months (1 year).

Display Figure 2
Figure 2 shows how forage availability in Loiyangalani division was monitored in the period between October 2009 and September 2010.

Figure 2: Graph of Loiyangalani division
Explain the representation of the forage availability by the different colors.

Point out that:

- The above satellite pictures capture the forage on the ground.
- As indicated on the key, the indicator of forage takes value between 0 and 1 on a continuum of colours from dark green (dense forage) to dark brown (no forage).
- The larger value means a better vegetation condition.

Take for instance Maikona and North Horr Divisions, in image 1 where the forage cover was quite low implying poor forage availability. Image 2 presents a contrast of the two divisions where Maikona division portraying dense forage cover than North Horr.

Stress to the trainees that:

- The level of forage determines the productivity and health of livestock which in turn directly affects the mortality of livestock. The prediction of livestock mortality is done after monitoring the forage availability for at least twelve months (1 year).

Display Figure 2

Figure 2 shows how forage availability in Loiyangalani division was monitored in the period between October 2009 and September 2010.

Illustrate to your trainees the trend of forage availability for the year October 2009 to September 2010 in Loiyangalani division.

Explain for instance that: Figure 2 indicates the trend of forage availability in Loiyangalani over 16 day period starting from October 2009 to September 2010. The horizontal zero line is the long-run average forage availability for that period of the month since 1981. Therefore, when the line is above this, it means that there is more than an average amount of forage on the ground relative to the norm. Similarly when the line is below zero, it indicates that forage availability is less than the norm. As such, the figure indicates that the last three months of 2009 in Loiyangalani division were considerably worse than normal. However, there must have been some rains (or perhaps large herd die offs that reduced the pressure on forage) as from early on in 2010 the forage situation improved to considerably better than average. The months thereafter have continued to see better than average forage but at a decreasing rate until September 2010 where it was around the long-term average.

Pose to the trainees: Under such a situation, what would you expect the condition of livestock to be in September 2010?

Clearly with forage conditions better than average for most of the time, we would expect that livestock in September 2010 were generally healthy.
Explain the construction of the index

Point out that: Pasture availability in the target division is monitored using satellite images (such as those shown in figure 1) for at least 12 months. The data on forage availability captured from each division is then fed into a response function and converted into an index for the division. This index is called predicted mortality index. Indeed, the predicted mortality index for Loiyangalani division for the period October 2009 to September 2010 read 0.02. This means that only 2 out of one hundred livestock were predicted to have perished as a result of the state of forage for that period.

Display Figure 3

Explain that: The predicted mortality index is constructed as summarized in figure 3.

Figure 3: Construction of the index

Explain how the integrity of the index is ensured

Pose a rhetorical question: How is the integrity of the predicted mortality index ensured?

Explain to the trainees that: Satellite data is provided by the independent international scientific organizations. The index is currently constructed by International Livestock Research Institute (ILRI) an international organization dedicated to improving pastoralist livelihoods through innovations in livestock management. UAP and Equity bank provide the insurance cover (UAP underwrites while Equity Bank provides agency services). Both the satellite data providers and ILRI are independent international organizations that cannot be influenced by the insurance company to manipulate the index.

Session Evaluation

Evaluate whether the session objectives have been met by asking your trainees the following questions:

i) What is the risk covered by IBLI?

ii) How is livestock mortality predicted?

iii) Can the insurance company manipulate the index in order to avoid making compensations?

iv) What is the relationship between forage availability and livestock mortality?

Based on the answers clarify any misconception that may exist.
Training Session 3

Session 3: Contract trigger level and geographical coverage

Session Objectives
By the end of this session the trainees should be able to:
i) Explain the significance of the trigger point
ii) Explain the geographical coverage of IBLI

Methodology
• Illustrations
• Discussions
• Lecture
• Question and answer
• Role play

Training and Instructional and materials
• Marsabit county Map with upper and lower Marsabit divisions indicated
• Flip charts
• Tape
• Computer and LCD projector

Time: 2 Hours

Activities
i) Explaining the significance of the trigger point
ii) Explaining the geographical coverage of IBLI
iii) Role Play: To Illustrate the Trigger Point and difference between Conventional Insurance
**Explain the Significance of the Trigger Point**

*Indicate to the trainees that:* In insurance, clients are expected to bear a small part of the cost of losses incurred. This cost is usually referred to as a **deductible**. (The Gabra and Boran have a practice similar to deductible called **Busa**. In this practice if a member of clan loses his livestock, the clan members may contribute livestock for him based on the level of the severity of the losses because the affected member of the clan is expected to bear part of the losses. Other pastoralist communities do have similar practices).

*Ask the trainees from other communities whether they have similar practice if there is tell them to describe it*

The severity of livestock losses are measured using a scale of zero to one hundred, where zero represents no livestock loss while hundred represents total livestock losses. Compensation is only made if the predicted livestock losses exceed 15 points (15%) on the scale. Clients are expected to bear any loss below 15 points (15%). This point is known as a **trigger point** and is treated as a deductible in IBLI.

**Display Figure 4:**

Figure 4, illustrates the predicted livestock deaths, trigger level and expected compensation graphically.

**Figure 4: Predicted Livestock Deaths and Expected Compensation in Percentages**
Explain to the trainees that: As indicated in figure 4, expected compensation will be zero until the trigger point is reached, at predicted mortality level of 20%, for instance, the expected compensation is correspondingly 5% (20% - 15%) of insured livestock value. Similarly, if the predicted mortality level is 50%, expected compensation will be 35% (50% - 15%) of insured livestock value.

Stress to the trainees that: If the predicted livestock losses are 15% and below, policyholders do not receive any compensation. The 15% is treated as a deductible and therefore no compensation will be made if the trigger point is not reached.

Explain the geographical coverage of the IBLI index.

Indicate to the trainees that: Marsabit County has different climatic conditions. As such, the index – predicted livestock mortality – is given at the division level. The IBLI index is split into five divisions, namely: North Horr, Maikona, Loiyangalani, Laisamis, and Central/Gadamoji. Because insurance payments are made according to the index level, this means that IBLI may make different payments across all the divisions. Every insurance policyholder within the same division, however, will receive the same rate of insurance payment (if the index is above the trigger).

Figure 6: IBLI Contract Spatial Coverage of Marsabit County
Marsabit County is further split into two separate contracts. We have the Upper Marsabit contract consisting of Maikona and North Horr divisions, and the Lower Marsabit contract consisting of Central/Gadamoji, Laisamis, and Loiyangalani divisions.

*Ask the trainees to: Indicate which among the two groups of divisions are drier.*

<table>
<thead>
<tr>
<th>Upper divisions (relatively drier)</th>
<th>Lower division (relatively less drier)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maikona</td>
<td>Gaddamoji</td>
</tr>
<tr>
<td>North Horr</td>
<td>Central</td>
</tr>
<tr>
<td></td>
<td>Laisamis</td>
</tr>
<tr>
<td></td>
<td>Loiyangalani</td>
</tr>
</tbody>
</table>

*Indicate that:* The relatively drier divisions have higher risk of experiencing drought than the relatively less drier divisions. This means that the livestock mortality in the upper divisions is likely to be higher than livestock mortality in the lower divisions. Based on the differences in risk of drought for the two sets of divisions, the premiums for upper Marsabit has been set higher than premiums for Lower Marsabit.

The premium for Upper Marsabit is therefore 5.5% for the average livestock value and the one for lower Marsabit is 3.25% for the average livestock value.

<table>
<thead>
<tr>
<th>Contract Cluster</th>
<th>Premiums</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Marsabit</td>
<td>5.5%</td>
</tr>
<tr>
<td>Lower Marsabit</td>
<td>3.25%</td>
</tr>
</tbody>
</table>

*Stress that:* Due the fact that the predicted mortality index is expected to be unique for each division the expected compensations are expected to be different for different divisions.

*Clarify that:* In as much as the premiums are per cluster (Upper and Lower), the payouts are made per division as forage availability is monitored per division.
Role Play to Illustrate the Trigger Point and Difference between Conventional Insurance and IBLI

Materials

- 100 cards with a picture of a dead cow
- 100 cards with a picture of live cow
- Cards with percentages in series of 0%, 5%, 10% …… up to 100%
- Figure 4: Predicted Livestock Deaths, Trigger Level and Expected Compensation in Percentages
- Flip charts
- Mark pens

Instruction to trainees

i) “Dead cow” cards to represent dead cows,
ii) “Live cow” cards to represent live cows
iii) “Percentage cards” to represent predicted livestock deaths

The Role play

1. Ask 10 trainees to volunteer as herders and tell them to assume that they come from Gaddamoji division. Let them each pick 10 live animal cards to represent ownership of 10 cows each.
2. Ask one trainee who will act as the predictor to pick one card from a well shuffled percentage cards and show it to the rest of the trainees.
3. Explain the meaning of the percentage on the card. If say 10% card is picked this indicate to the trainees that this means that 10 animals in every 100 animals are predicted to have died in the Gaddamoji division.
4. Tell the 10 herders to put back the animals back together since they usually graze together.
5. Based on the prediction made ask the predictor to pick the number of animals that are predicted to have died from the pack of live cow cards and replace them with the dead cow cards. If say again 10% card was picked, 10 live cow cards should be replaced with 10 dead cow cards
6. Ask the predictor to shuffle the 10 dead cow cards together with the remaining live cow cards
7. Ask the 10 herders to again pick 10 cards from the well shuffled cards at random without looking at the picture on the card until all of them have picked
8. After each of the herders has picked tell them to reveal to the rest of the trainees how many live animals and dead animal they have and record them on a flip chart.
9. After recording the number of live animals and dead animals for each of the herders explain that even if say 10 animals (assuming again 10% card was picked) in every 100 animals are predicted to have died, each of the herders suffers different levels of losses.

10. Repeat the exercise with different trainees until the point is understood.

11. Where percentages cards between 0 and 15 are picked clarify that the herders are expected to bear the cost of the losses, they will not be compensated. Since the herders are expected to bear the predicted losses are below 15 deaths in every 100, compensation will only be for losses above 15 deaths in every 100.

12. Display Figure 4 and explain it again to drive home the concept of the trigger level.

13. If say 20% card is picked, then the predicted livestock deaths are 20 in every 100 for the location. Compensation for the location then will be for the predicted deaths that are above the 15 deaths in every 100 that the herder is expected to bear. In this case then the all herders in the location will be compensated for 5 deaths in every 100 even if each suffered different levels of losses. In conventional insurance each herder should be compensated for the actual animals that died (the problem with it is the verification of actual deaths which laborious and expensive for the insurance company).

**Summarize the key learning points of the role play:**

i) Predicted livestock mortality is based on the predicted mortality for the division and not on individual herders’ loss experiences. Consequently herders may be over or under compensated depending on actual losses suffered. Good animal care or husbandry is encouraged.

ii) Assessment of actual losses is not required. Compensation is based on the predicted mortality index for the division.

iii) Compensation may only begin after the trigger level is exceeded.

iv) Due to the fact that assessment of individual livestock losses is not required before IBLI compensation, compensations are faster, less protracted and objective unlike in conventional insurance.

**Session Evaluation**

Evaluate whether the session objectives have been met by asking your trainees the following questions:

i) Explain the significance of the trigger level

ii) Identify the geographical clustering of IBLI coverage

iii) Explain the reasons for the geographical clustering

iv) What are the conditions for IBLI compensations to be made

*Based on the answers clarify any misconception that may exist*
Training Session 4

Session 4: Insurable livestock unit, contract premium and sum assured

Session Objectives
By the end of this session the trainees should be able to:
i) Explain the insurable livestock unit
ii) Determine sum assured for insured livestock
iii) Calculate premium value for insured livestock

Methodology
• Illustrations
• Lecture
• Question and answer
• Role play

Training and Instructional and materials
• Calculator
• Flip charts
• Tape
• Computer and LCD projector

Time: 3 Hours

Activities
i) Calculating premium and sum assured.
ii) Role play: To illustrate the determination of the sum assured, contract premiums trigger point, geographical coverage and expected compensation
**Explain Insurable livestock unit**

*Point out to the trainees that: For insurance coverage purposes livestock are converted into a standard livestock unit known as a Tropical Livestock Unit (TLU). The TLU values for different livestock are shown in table 4:*

<table>
<thead>
<tr>
<th>1 TLU = 1 Cow,</th>
<th>1 Cow = 1 TLU</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 TLU = 0.7 Camel,</td>
<td>1 Camel = 1.4 TLU</td>
</tr>
<tr>
<td>1 TLU = 10 goats</td>
<td>1 goat = 0.1 TLU</td>
</tr>
<tr>
<td>1 TLU = 10 sheep.</td>
<td>1 Sheep = 0.1 TLU</td>
</tr>
</tbody>
</table>

This means that on TLU basis 1 cow is equivalent to 10 goat or sheep, and 1 camel is equivalent to 1 cow and 4 goats or sheep.

The value for one TLU has been set at Ksh 15,000. This value may then be used to arrive at the predetermined average value of livestock across Marsabit as shown in Table 6.

<table>
<thead>
<tr>
<th>Livestock</th>
<th>TLU (2)</th>
<th>Value of TLU (3)</th>
<th>Average Market Price (Kshs) (4) = Column (2)× (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camel</td>
<td>1.4</td>
<td>Ksh.15,000</td>
<td>21,000</td>
</tr>
<tr>
<td>Cattle</td>
<td>1.0</td>
<td>Ksh.15,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Goat</td>
<td>0.1</td>
<td>Ksh.15,000</td>
<td>1,500</td>
</tr>
<tr>
<td>Sheep</td>
<td>0.1</td>
<td>Ksh.15,000</td>
<td>1,500</td>
</tr>
</tbody>
</table>

**Explain the sum assured**

*Indicate to the trainees that: The sum assured is the value of livestock insured. It is given by multiplying the predetermined average value of each livestock by number of livestock being insured.*

One decides the number of livestock they wish to insure and the insurance company does not require verification of livestock numbers. One may even decide to insure different numbers of livestock each period. For example:

i) If you insure 1 camel your sum assured will be Ksh 21,000

ii) If you insure 1 camel and 1 cow your sum assured will be Kshs. 21,000 plus Kshs. 15,000 = Kshs. 36,000

iii) If you insure 1 camel, 1 cow, 1 goat and 1 sheep your sum assured will be Kshs. 21,000 +15,000 +1,500 + 1,500 = Kshs. 39,000

iv) If you insure 2 camels, 3 cows, 5 goats and 10 sheep your sum assured will be as shown in table 7:
### Table 7: Calculation of Sum Assured

<table>
<thead>
<tr>
<th>Livestock</th>
<th>Average Market Price (Kshs)</th>
<th>Number of Livestock Insured</th>
<th>Value of livestock Category (Kshs) [Column (2) ×(3)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camel</td>
<td>21,000</td>
<td>2</td>
<td>42,000</td>
</tr>
<tr>
<td>Cattle</td>
<td>15,000</td>
<td>3</td>
<td>45,000</td>
</tr>
<tr>
<td>Goat</td>
<td>1,500</td>
<td>5</td>
<td>7,500</td>
</tr>
<tr>
<td>Sheep</td>
<td>1,500</td>
<td>10</td>
<td>15,000</td>
</tr>
</tbody>
</table>

Total (Sum Assured) = 109,000

The sum assured is therefore Kshs 109,000

**Notice that:**

**Sum assured is the value of livestock insured but not the expected compensation. The expected compensation is dependent on level of drought severity and the 15% deductible**

### Explain the premium

*Indicate that:* A premium is the cost of insuring livestock. It is obtained by multiplying the sum assured by the set percentage of the specific division (5.5% and 3.25% for upper and lower Marsabit divisions respectively). The TLU for the insured herd has been converted into premium payable in different divisions and for different livestock as shown in Table 8:

### Table 8: Premiums for different types of livestock in lower and upper Marsabit

<table>
<thead>
<tr>
<th>Insurable Livestock</th>
<th>Premiums for Marsabit Upper divisions in Ksh. per unit</th>
<th>Premiums for Lower Marsabit divisions in Ksh. per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>(5.5% x 15,000) = 825</td>
<td>(3.25% x 15,000) = 487.50</td>
</tr>
<tr>
<td>Camel</td>
<td>(5.5% x 21,000) = 1,155</td>
<td>(3.25% x 21,000) = 682.50</td>
</tr>
<tr>
<td>Goat</td>
<td>(5.5% x 1,500) = 82.50</td>
<td>(3.25% x 1,500) = 48.75</td>
</tr>
<tr>
<td>Sheep</td>
<td>(5.5% x 1,500) = 82.50</td>
<td>(3.25% x 1,500) = 48.75</td>
</tr>
</tbody>
</table>

**Exercise:**

Divide the trainees into groups and issue them with calculators to calculate contract premium for Wario from North Horr division and Ekwe from Central division and report on their answers.

- **Group 1:** Wario have 20 goats, 30 sheep, 5 cows and 3 camels.
- **Group 2:** Ekwe have 5 goats, 8 sheep, 10 cows and 2 camels.

Expected answers are shown in Tables 9 and 10.
Table 9: Premium Calculation for Wario

<table>
<thead>
<tr>
<th>Insurable Livestock (1)</th>
<th>Number of Livestock (2)</th>
<th>Premiums (Ksh) per unit (3)</th>
<th>Total premiums (Ksh) (4) = [Column (2) ×(3)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>5</td>
<td>825</td>
<td>4125</td>
</tr>
<tr>
<td>Camel</td>
<td>3</td>
<td>1,155</td>
<td>3465</td>
</tr>
<tr>
<td>Goat</td>
<td>20</td>
<td>82.50</td>
<td>1650</td>
</tr>
<tr>
<td>Sheep</td>
<td>30</td>
<td>82.50</td>
<td>2475</td>
</tr>
<tr>
<td><strong>Total (Premium)</strong></td>
<td></td>
<td></td>
<td><strong>11,715</strong></td>
</tr>
</tbody>
</table>

Table 10: Premium Calculation for Ekwe

<table>
<thead>
<tr>
<th>Insurable Livestock (1)</th>
<th>Number of Livestock (2)</th>
<th>Premiums (Ksh) per unit (3)</th>
<th>Total premiums (Ksh) [Column (2) ×(3)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>10</td>
<td>487.50</td>
<td>4875</td>
</tr>
<tr>
<td>Camel</td>
<td>2</td>
<td>682.50</td>
<td>1365</td>
</tr>
<tr>
<td>Goat</td>
<td>5</td>
<td>48.75</td>
<td>243.75</td>
</tr>
<tr>
<td>Sheep</td>
<td>8</td>
<td>48.75</td>
<td>390</td>
</tr>
<tr>
<td><strong>Total (Premium)</strong></td>
<td></td>
<td></td>
<td><strong>6873.75</strong></td>
</tr>
</tbody>
</table>

**Explain that premium is:**
1. Paid once for a contract period (either in January/February or August/September) and is valid for one year
2. Non-refundable
3. Dependent on the division you reside
4. Dependent on the number and type of livestock you wish to insure
5. Nontransferable from one period to another

**Role play to illustrate the determination of the sum assured, contract premiums trigger point, geographical coverage and expected compensation**

**Materials**
- 400 cards with a picture of a dead cow
- 400 cards with a picture of live cow
- 10 Blank cards to represent money
- Cards with percentages in series of 0%, 5%, 10% ……… up to 100%
- Figure 4: Predicted Livestock Deaths, Trigger Level and Expected Compensation in Percentages
- Flip charts
- Mark pens
Instruction to trainees
i) “Dead cow” cards to represent dead cows,
ii) “Live cow” cards to represent live cows
iii) “Percentage cards” to represent predicted livestock deaths

Instructions
1. Divide the trainees into 4 groups: 2 to represent lower Marsabit divisions and 2 to represent upper Marsabit divisions
2. One trainee to act as the predictor of livestock deaths
3. The trainer to act as an insurance clerk. The insurance clerk to have blank cards that are expected to serve as money and a marker pen.
4. Give each of the group 100 live cow cards, a bank money card, calculator and a marker pen

The Role Play
1. Ask each of the group to decide the number of cows they wish to insure. Record this on a flip chart.
2. Given that the average market price for a cow in Marsabit County is given as Kshs. 15,000 ask the trainees to determine the sum assured by multiplying the number of animals they wish to insure by Kshs. 15,000. Confirm the figures and record on a flip chart
3. Based on the insurance premium per cow which is Ksh 487.50 and 825 for lower and upper Marsabit divisions respectively ask each of the group to calculate the total premium of the cows they wish to insure. Each of group should confirm the premium figure with the trainer.
4. On confirming the figures, ask the trainees to write the premium figure on the money card
5. Each of the groups should then send one of their members to buy the insurance from the insurance agent using the money card with the premium indicated. The insurance agent to record the details.
6. Ask the predictor to pick 4 cards, one at a time from a well shuffled park of “percentages cards” to predict the livestock deaths for the 4 divisions. Each time the percentages card is picked it should be shown to all trainees
7. Explain the meaning of the percentage on the card. If say 10% card is picked for the first division, indicate to the trainees that this means that 10 animals in every 100 animals are predicted to have died in that division.
8. Based on the prediction made ask the predictor to pick the number of animals that are predicted to have died from the pack of live cow cards and replace them with the dead cow cards for each group. If say again 10% card was picked, 10 live cow cards should be replaced with 10 dead cow cards
9. Record the figures for dead cows and live cows for each group on a flip chart.

10. After recording the number of live animals and dead animals for each of the divisions explain that even if say 10 animals (assuming again 10% card was picked) in every 100 animals are predicted to have died, each of the herders in the division suffers different levels of losses (as was illustrated in the previous role play).

11. Where percentages cards between 0 and 15 are picked clarify that the herders are expected to bear the cost of the losses, they will not be compensated. Since herders in each division are expected to bear the cost if predicted losses are below 15 deaths in every 100, compensation will only be for losses above 15 deaths in every 100.

12. If percentage cards above 15% are picked say 20%, then indicate to the trainees that the predicted livestock deaths are 20 in every 100 for the location. Compensation for the location then will be for the predicted deaths that are above the 15 deaths in every 100 that the herder is expected to bear. The group is as such required to subtract 15% from the predicted percentage deaths. In this case it will be 20% – 15% = 5%.

13. Ask each group to calculate their expected compensation after which they send one of their members to pick their compensation from the insurance clerk.

14. The insurance clerk calculates the expected compensations for each of group and writes each figure on a separate blank money card. As each of the group comes for their compensations one at a time, the clerk confirms their figures and issue compensation in form of the money card as the rest of the trainees observe.

**Explain that:**

The payouts are not based on individual losses but on predicted deaths for a division. This means that some herders in a division may be overcompensated and others under compensated.
Summarize the key learning points of the role play:

i) The sum assured is the value of insured livestock. It is obtained by multiplying the average market value of livestock by the number of livestock that one has insured.

ii) Contract premiums are the cost incurred for one to buy an insurance contract. For IBLI, the contract premiums are set at 5.5% of sum assured for upper Marsabit divisions and 3.25% of sum assured for lower Marsabit divisions.

iii) The predicted mortality index is monitored per division and compensations may only be made if the trigger for a given division is exceeded.

iv) Different divisions are expected to receive different levels of compensation because the indices for the different divisions may not be the same.

v) Expected compensations are based on the predicted mortality index and not individual losses therefore loss assessment is not required.

Session Evaluation
Evaluate whether the session training objectives have been met by asking the trainees the following questions:

i) How is the sum assured calculated?

ii) What are the premiums of the different livestock covered by IBLI?

iii) What are the justifications for geographical clustering for IBLI coverage?

iv) How are compensations determined?

Based on the answers clarify any misconception that may exist.
Training Session 5

Session 5: IBLI Purchase and Compensation Processes

Session Objectives
By the end of this session the trainees should be able to:
i) Describe the IBLI purchase process
ii) Describe IBLI compensation processes
iii) Explain the IBLI Contact Sale Period and potential compensations

Methodology
- Illustrations
- Lecture
- Question and answer

Training and Instructional and materials
- Flip charts
- Tape
- Computer and LCD projector

Time: 1 hour

Activities
i) Description of the IBLI purchase process
ii) Description of the IBLI compensation process
iii) Explanation of IBLI sale period and potential compensations
Describe the procedure for the purchase of IBLI premium

**Premium Payment Procedure (Non HSNP Clients)**
These are clients without HSNP cards
1. The client present himself/herself at Equity Branch
2. Produce ID
3. Client indicates the number and types of animals they wish to insure
4. The Agent shows the client the premium payable
5. The client confirms the premium figures
6. The agent authorize the transaction
7. The client is issued with transaction receipt when the transaction is over

**Premium Payment Procedure (HSNP Clients)**
These are clients with HSNP cards
1. The client present himself/herself at Equity Branch
2. The client indicates the number and type of animals they wish to insure
3. The Agent shows the client the premium payable
4. The client confirms the premium figures
5. The agent authorize the transaction
6. The client is issued with transaction receipt when the transaction is over

Describe the compensation process for IBLI product

*Display figure 7*
Figure 7: IBLI contract sale period and potential compensations

1 year contract coverage

![Diagram showing IBLI contract sale period and potential compensations](image)

Sale period For LRLD

Period of NDVI observations for constructing LRLD mortality index

Sale period For SRSD

Period of NDVI observations for constructing SRSD mortality index

Predicted LRLD mortality is announced.
Indemnity payment is made if IBLI is triggered

Predicted SRSD mortality is announced.
Indemnity payment is made if IBLI is triggered
Explain the IBLI Contract Sale Period and potential compensations

*Explain that:* IBLI has two potential contract periods. One runs from March to February and the purchase period for this contract is in the months of January/February every year. The other runs from October to September and the purchase period for this contract are in the months of August/September every year. The insurance has two potential compensations. The first potential compensation is scheduled at the end of long rain/long dry season in September: *(Ilngerngerwa – Samburu; Bonn Hagaya – Borana & Gabra; Akiporo – Turkana; Guu – Rendille)* and the second potential compensation is scheduled at the end of short rain/short dry season in February *(Adoles – Borana/Gabra; Ngirupe – Turkana; Yerr – Rendille; Ultumeren – Samburu)*

*Stress to the trainees that:* Presence of drought conditions do not mean that compensations will be automatically made. The drought severity must be such that the trigger level is exceeded. The level of compensation is also based on the number of animals insured.

**Session Evaluation**

Evaluate whether the session objectives have been met by asking your trainees the following questions:

i) Describe the IBLI purchase process

ii) Describe the IBLI compensation process

iii) When are the sales made for the for the IBLI contract

iv) How many potential compensations are there in the IBLI contract period

v) When are the potential compensations made if the conditions for compensations are met

*Based on the answers clarify any misconception that may exist*
Training Session 6

Session 6: The value of IBLI to the pastoralists

Session Objectives
By the end of the session the trainee should be able to:
• Explain the value of IBLI to potential clients
• Identify the ideal method of creating awareness of IBLI product features to target clients
• Identify the ideal approach to reaching the potential clients

Methodology
• Question and answer,
• Discussion

Materials
• Flip charts
• Note cards
• Markers
• Pens
• Tape
• Computer and LCD projector

Time: 1 Hour
Explain the value of IBLI to potential clients

**Pose to the trainees: What factors would you consider before buying a given product? List their responses on a flip chart**

The rational consumer will only buy those goods and services that add value to their lives. The key factors that consumers consider before buying a service include:

i) Satisfaction of current need
ii) Affordability of the service
iii) Clarity of the service features

**Ask the trainees: Does IBLI product features as explained in the preceding sessions fulfill the key factors that consumers consider before buying a service?**

Go through each of the factors one by one with the trainees and discuss the extent to which the IBLI product fulfils them:

i) The recurrent drought problem is a current need for the pastoralist
ii) The premiums are set at affordable levels
iii) Concerted efforts have been made to clarify the product features - explore the opinion of the trainees about the clarity of the IBLI product features.

**Ask the trainees to: Identify the potential benefits of IBLI to pastoral communities based on the knowledge gained on the IBLI product features in the previous training sessions. List their responses on a flip chart**

The potential benefits to the pastoralist communities which include among others the following:

**Socio-psychological benefits**

i) Emotional protection from risks of losses
ii) Maintenance of social status in the society

**Economical benefits**

i) Cost effective - the premium is affordable to pastoralists and potential compensation is adequate
ii) Economic stability - households will be cushioned against losses caused by drought
iii) Improved quality of life - safeguard against dehumanizing effect of poverty

**Indicate to the trainees that** based on the benefits identified concerted efforts should be made to create awareness of the IBLI product to the pastoralist and agro-pastoralists so that they can make informed decision in dealing with the risk of drought related livestock death
Creating awareness of the IBLI to the pastoralist community

*Pose to the trainees: Which communication method is most suitable for creating awareness of IBLI to pastoralists?*

*Explain to the trainees that:* There are many communication platforms today with varying degrees of success in creating awareness about different goods and services. The choice of method of communication is dependent on many factors like level of education and nature of the product. The target clients are pastoralists and agro-pastoralists. They are often:

i) Mostly illiterate  
ii) Generally unfamiliar with the concept of insurance  
iii) Situated in a remote and infrastructure deficient areas  
iv) Pastoralists who are constantly moving in search of pasture for their livestock

Consequently the mode of delivery of the information about IBLI product to the pastoral communities will be *personal (face to face) communication* through extension workers. Extension workers have been identified as the ideal way of educating the pastoralist because they will be relatively literate, will be part of the pastoral communities and will therefore explain the product details using local dialects. Reasons why personal (face to face) communication is considered ideal for creating awareness about IBLI are shown in table 11.

**Table 11: Reasons why personal (face to face) communication is ideal for IBLI**

<table>
<thead>
<tr>
<th>Reasons why Personal (face to face) communication is ideal for IBLI</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>i)</em> The target market is largely less literate</td>
</tr>
<tr>
<td><em>ii)</em> Creates intimacy</td>
</tr>
<tr>
<td><em>iii)</em> Communication infrastructure for most of the channels are not well developed in the market areas except personal selling</td>
</tr>
<tr>
<td><em>iv)</em> Word of mouth is more convincing than any other means of selling</td>
</tr>
<tr>
<td><em>v)</em> Word of mouth sources are low cost compared to others tools</td>
</tr>
<tr>
<td><em>vi)</em> The power of referrals from friends, family or opinion leaders is particularly important among the pastoralist communities</td>
</tr>
<tr>
<td><em>vii)</em> The target market is largely communal in nature such that the position of the elders and opinion leaders are revered</td>
</tr>
</tbody>
</table>

*INDEX-BASED LIVESTOCK INSURANCE 37*
Discuss the methods of accessing the target IBLI clients:

**Pose to the trainees: Which is the best approach of accessing the IBLI target clients?**

Possible responses include: Village Barazas, house to house meetings, public rallies, road shows, congregations at watering points during village water committee meetings. Alternatively they may be accessed through local development associations etc.

Engage the trainees in a discussion of the most ideal and cost effective method to be adopted:

• The nature of the pastoralists’ settlements, the cost and effectiveness, rules out approaches such as road shows and public rallies.
• The recommended approach in order of preference would therefore be village Barazas, congregations at watering points during village water committees, through local development associations and house to house meetings.

**Session Evaluation**

Evaluate whether the session objectives have been met by asking the following questions:

• Who are the potential target clients for IBLI product?
• What are key factors that consumers look for before buying a service?
• What are the benefits of IBLI product to pastoralists?
• Which is the most appropriate method of creating awareness of IBLI to the pastoralist and why?

*Wrap up the training by asking the trainees to inquire on areas of IBLI that are still unclear which you should clarify accordingly*
EVALUATION INSTRUMENT FOR INDEX BASED LIVESTOCK INSURANCE (IBLI)

Rationale
IBLI is a unique insurance product that is different from formal risk management approaches designed purposely for pastoralists and agro-pastoralist communities. This market segment is also new to the practice of insurance businesses because their livelihood predominantly involves herding and limited subsistence farming. The two scenarios therefore demand a careful approach to evaluating the functional effectiveness of index-based livestock insurance in imparting knowledge, changing behavior and improving livelihoods of the pastoralist and agro-pastoralists.

Training needs analysis
The pastoralist and agro-pastoralist communities in the target areas have continuously suffered the negative effects of repeated droughts depleting livestock and hence reducing the herders to abject poverty. In recognition of this, ILRI, Equity Bank and UAP insurance have rolled out IBLI as a drought safety net. The target market therefore needs to understand the product and its utility. Hence the pastoralists training needs for this project are:

i) Knowledge of features about IBLI
ii) Ways and means of accessing IBLI product
iii) Utilization of IBLI product as means of securing the pastoralists against droughts

Purpose of IBLI project evaluation
The purpose of evaluating this project is to determine whether the training provided to pastoralists and agro-pastoralists has achieved its objectives. The overall objective of IBLI training is to equip pastoral and agro-pastoralists potential with knowledge and skills that can help them understand and appreciate how index-based livestock insurance works so that they are able to make an informed decision in investing in insurance. The training also has the objective of sharing information and creating awareness about the IBLI product.

It is expected that by the end of the training the trainees should be able to:

i) Explain clearly the key features of IBLI
ii) Describe IBLI purchase and compensation processes
iii) Explain the advantages derived from investing in the IBLI product
iv) Make informed decisions when dealing with the risk of drought related livestock deaths.
**Indicative outcomes**
The expected outcome from the index-based livestock insurance training shall be as following:

i) Increased level of awareness of IBLI product and its features

ii) Improved methods of managing drought related risks through informed decision making

iii) Increased number of IBLI policy holders

**IBLI evaluation techniques**
The evaluation will employ 4 factor comparison techniques. These techniques is quite current in the market and popular because it covers all the four levels of training, that is, reaction, learning, behavior, and impact levels.

**IBLI evaluation period**
Evaluation of IBLI programme is proposed to be carried out at the following times:

**At the end of individual sessions**
As trainees participate in skill practice, role plays, exercises, demonstrations, simulations and other learning activities, the trainer will observe the degree to which they will have mastered the content. This will be followed by oral evaluation of skills and knowledge gained at the end of each session. Evaluation tool at this stage will be oral questions.

**At the end of the training**
Trainees will be provided with *End of Training Evaluation Quiz (on page 42)*. The scope of evaluation at this stage will cover training content, and knowledge acquired during the training. The target for this evaluation is the trainees who have undergone the training. Evaluation tool at this stage will be an objective quiz. The objective of this evaluation is to identify areas of the training that have not been well understood with a view to having the areas revisited in the final session. This is intended to make sure that misconceptions are cleared before the trainees embark on the task of educating the pastoralists about IBLI

**After the training**
After at least one year the trainer will evaluate attitude, behavioural change and impact of the pastoralists to determine whether they are applying what they learned to their life situations and the impact of the performance on the pastoralist’s livelihood. The target for this evaluation is the pastoralist and agro-pastoralist. This stage of evaluation will assess the levels of the IBLI product uptake and how individual families that bought IBLI product have had their livelihood improved. Evaluation tool at this stage will be Part two of the evaluation too on *page 48 (Long-term Evaluation Tool)* and observation.
Evaluation of competencies

Evaluation of this training programme will assess competency levels achieved as a result of the training input as follows:

i) Skills uptake: Evaluate ability to describe and disseminate information on IBLI

ii) Knowledge acquisition: Evaluate understanding of the principles behind risk management using IBLI

iii) Attitude changes: Evaluate the level of IBLI appreciation and changes in the perceptions of the trainees about IBLI

iv) Behavioral changes: Evaluate if there are any changes in the way trainees manage risk using IBLI product

v) Impact: Evaluate positive improvement in the livelihoods of the trainees through IBLI product
END OF TRAINING EVALUATION TOOL

Instructions to trainees:
i) Answer all the questions of this training evaluation
ii) All questions carry equal weights
iii) Time allowed for the quiz is 1 hour

1. The following are the main differences between Index-Based Livestock Insurance (IBLI) and Conventional insurance. Which one is not?

<table>
<thead>
<tr>
<th>Traditional insurance</th>
<th>Index based insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Suitable for independent (uncorrelated risk) e.g. car accident</td>
<td>Suitable for correlate risk e.g. drought</td>
</tr>
<tr>
<td>B. Compensation done on actual losses</td>
<td>Measurable whether event is a proxy whether losses e.g. rainfall failure</td>
</tr>
<tr>
<td>C. Payout process is protracted and subjective</td>
<td>Objective triggers and structured rules exist</td>
</tr>
<tr>
<td>D. Claim is faster</td>
<td>Claim is slower</td>
</tr>
<tr>
<td>E. Types of loss is to individuals</td>
<td>Loss is to the community/locality</td>
</tr>
</tbody>
</table>

2. The following statements are true about construction of the predicted mortality index. Which one is not?
   A. To construct the index, pasture availability is monitored using satellite images for each division for at least one year
   B. Pasture availability data for respective divisions is fed into a response function to produce the predicted livestock mortality index.
   C. The index is currently constructed by International Livestock Research Institute (ILRI) an international organization dedicated to improving pastoralist livelihoods through innovations in livestock management.
   D. The insurance company is not involved in the construction of the index
   E. None of the above

3. The following are the livestock covered by IBLI which one is not?
   A. Cattle
   B. Camel
   C. Goat
   D. Sheep
   E. Donkey
4. The following are the order for the Tropical Livestock Unit (TLU) for one cattle, camel, goat and sheep respectively. Which one is the correct order?
   A. 0.1, 1, 1.4, 0.1
   B. 1.4, 0.1, 0.1, 1
   C. 1, 1.4, 0.1, 0.1
   D. 0.1, 0.1, 1, 1.4
   E. None of the above

5. Identify the correct trigger level of the IBLI contract
   A. 10%
   B. 20%
   C. 15%
   D. 25%
   E. None of the Above

6. Which of the following is untrue about the trigger level
   A. Compensation is only made if the predicted livestock losses exceed 15%
   B. Trigger level is treated as a deductible in IBLI because clients are expected to bear a small part of the cost of losses incurred.
   C. The trigger level is different for different divisions
   D. Compensation is only made if the predicted livestock losses are below 15% on the scale
   E. C and D

Questions 7 to 13 deal IBLI contract sum assured, premiums, and the geographical coverage:

7. Lokichar lives in Loiyangalani division he wishes to insure 15 camels 27 cows and 40 sheep. What is the correct figure of his sum assured?
   A. Ksh. 780,000
   B. Ksh. 40,500
   C. Ksh. 60,000
   D. Ksh. 280,500
   E. Ksh. 25,350
8. Boru hails from Maikona division he wishes to insure 23 camels 18 cows and 32 goats. How much premium should he pay?
   A. Ksh. 14,850
   B. Ksh. 26,565
   C. Ksh. 2,640
   D. Ksh. 44,055
   E. Ksh. 801,000

9. Assume that the index for Loiyangalani is determined to be 13 percent how much will Lokichar be expected to receive as compensation
   A. Ksh. 280,500
   B. Ksh. 25,350
   C. Ksh. 40,500
   D. Ksh. 60,000
   E. No compensation

10. Assume that the index for Maikona is determined to be 27 percent. How much is Boru expected to receive as compensation?
    A. Ksh. 44,055
    B. Ksh. 801,000
    C. Ksh. 96,120
    D. Ksh. 26,565
    E. No compensation

11. Assume that Godana who also comes from Maikona insured the same number and types of livestock as Boru. He however bought a truckload of hay that ensures all his livestock survived the drought. How much compensation should Godana expect?
    A. Ksh. 44,055
    B. Ksh. 801,000
    C. Ksh. 96,120
    D. Ksh. 26,565
    E. No compensation

12. The following are statements about of IBLI premiums. Which statement is incorrect?
    A. Paid once for a contract period of one year
    B. Non-refundable
    C. Dependent on the division you reside
    D. Dependent on the number and type of livestock you wish to insure
    E. Transferable from one contract period to another
13. The following are the correct divisions for the IBLI contract cover in lower Marsabit. Which one is not?
   A. Gaddamoji
   B. North Horr
   C. Central
   D. Laisamis
   E. Loiyangalani

14. Identify the correct Sales period for the IBLI contract
   A. January/March and September/October
   B. January/February and September/November
   C. January/February and August/September
   D. February and September
   E. None of the above

15. The following are correct statements about IBLI compensations. Which one is incorrect?
   A. The trigger level must be exceeded for compensation to be made
   B. One must have purchased IBLI for the relevant period of the drought
   C. You receive a payment based on how much insurance you bought
   D. You are required to verify your herd size or herd losses while taking insurance cover.
   E. Depending on what the index states, you may get over or under compensated compared to your actual losses

16. How many potential compensations are there in the IBLI contract period
   A. One
   B. Two
   C. Three
   D. Four
   E. Five

17. When are the potential compensations of the IBLI contract made?
   A. February
   B. March and October
   C. September
   D. February, May and September
   E. January, May, August and October
18. Which of the following is the correct risk covered by the IBLI contract
A. Risk of disease drought related livestock deaths
B. Risk of livestock losses resulting from raids,
C. Risk of livestock losses resulting from floods, and localized storms,
D. Risk of drought related livestock deaths
E. Risk of livestock losses resulting from poor livestock keeping

19. The following are the reasons why the face to face communication is considered more appropriate over other modes of creating awareness for IBLI product. Which one is not?
A. The target market is largely literate
B. It creates intimacy
C. The target market is largely communal in nature such that the position of the elders and opinion leaders are revered
D. Word of mouth sources are low cost compared to others tools
E. The power of referrals from friends, family or opinion leaders is particularly important among the pastoralist communities

20. Which of the following methods of accessing the pastoralist would be the most cost effective
A. Village Barazas
B. House to house meetings
C. Road shows
D. Public rallies
E. Market places on market days

Use true (T) or false (F) to answer the following questions 21 to 30

21. The predicted livestock mortality index is constructed from the forage availability data for a period of at least one year

22. The predicted livestock mortality index for all divisions for a given period are the same

23. The premiums payable per TLU for all divisions are uniform

24. The potential compensation for loss is the same as the sum assured

25. The potential compensations are the same for all herders in a given division

26. Proof of livestock deaths is necessary before compensation can be made

27. The insured pastoralists are required to make claims for their compensation to be processed
28. Pastoralists are required to show proof of livestock ownership before they can purchase IBLI.

29. If one purchases IBLI for many years which drought does not occur and fails to buy insurance and fails to buy IBLI in the year that a severe drought strikes he/she will still be compensated.

30. If conditions for compensations are met one will receive a payment based on how much insurance he/she bought.

END
Long-term Evaluation tool

To be conducted after at least one year of the implementation of the training. The objective is to evaluate the extent of behavior change and the impact of the product on the livelihoods of the pastoralists.

A. How often do you use the knowledge and skills you gained from IBLI training to do the following: *(Tick (✓) your responses as appropriate against each of the following behavior)*

<table>
<thead>
<tr>
<th>Indicators of Behavior Change</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Always</td>
</tr>
<tr>
<td>1. Prepare for drought related risks</td>
<td></td>
</tr>
<tr>
<td>2. Insure livestock with IBLI</td>
<td></td>
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<tr>
<td>3. Personally determine the sum assured</td>
<td></td>
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<tr>
<td>4. Personally determine the premiums for insured livestock</td>
<td></td>
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<tr>
<td>5. Access information on trigger Level</td>
<td></td>
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<tr>
<td>6. Personally able to determine expected compensation after announcement of trigger level</td>
<td></td>
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<tr>
<td>7. Personally complete IBLI purchase processes</td>
<td></td>
</tr>
<tr>
<td>8. Personally complete IBLI compensation process</td>
<td></td>
</tr>
</tbody>
</table>

9. The training has changed my approach to coping with drought related livestock losses
   Yes...............  
   No..............  
   If yes, indicate how.......................................................................................................................................................
   If no, indicate why.....................................................................................................................................................

10. How else has the knowledge and skills you gained from IBLI training changed (if any) your ways of coping with drought related risks (The evaluator to list them all)  
   i) .................................................................................................................................................................
   ii) ...............................................................................................................................................................  
   iii) ...............................................................................................................................................................  
   iv) ...............................................................................................................................................................  

B. List (if any) ways that IBLI has impacted on your livelihood. Give your responses against provided indicative outcomes. (The evaluator to record as appropriate)

1. It has helped me restock after livestock losses
   Indicate the number of livestock insured....................
   Number of livestock restocked after compensation...........
2. It enabled me to feed my family during the drought
   Yes......................................
   No......................................
   Somehow (up to some point).........

3. It enabled me to continue paying for my children's school fees after losing my livestock
   Yes......................................
   No......................................
   Somehow (up to some point).........

4. It has reduced my dependence on food aid during drought
   Yes......................................
   No......................................
   Somehow (up to some point).........

5. It has helped me start some income generating activities after livestock losses (List the income generating activities started)
   ......................................................................................................................
   ......................................................................................................................
   ......................................................................................................................

6. It has reduced my income
   Yes......................................
   No......................................
   Somehow (up to some point).........

7. List any other ways that you consider the training IBLI to have impacted on your livelihood
   i) .............................................................................................................
   ii) .............................................................................................................
   iii) .............................................................................................................
   iv) .............................................................................................................

C. Indicate your opinions towards IBLI appropriately (The evaluator to record as appropriate)
1. I intend to continue buying IBLI irrespective of the outcome in drought conditions
   Yes......................................
   Indicate reasons why.................................................................
   .............................................................................................................
   .............................................................................................................
   Somehow (up to some point).........
   Indicate reasons why.................................................................
   .............................................................................................................
   .............................................................................................................
   No......................................
   Indicate reasons why.................................................................
   .............................................................................................................
   .............................................................................................................
2. IBLI is designed to fulfill a current need for the pastoralists
   Yes................
   No...............  
   If yes, indicate how................................................................................................................
   ................................................................................................................................................
   ................................................................................................................................................
   If no, indicate why.....................................................................................................................
   ................................................................................................................................................
   ................................................................................................................................................

3. IBLI is appropriate in managing the drought related livestock risk for the pastoralists
   Yes................
   No...............  
   If yes, indicate how................................................................................................................
   ................................................................................................................................................
   ................................................................................................................................................
   If no, indicate why.....................................................................................................................
   ................................................................................................................................................
   ................................................................................................................................................

4. Information about IBLI is readily available in my village
   Yes..........................
   No........................  
   If yes how is the information obtained? ..............................................................................
   ................................................................................................................................................
   ................................................................................................................................................
   Somehow (up to some point)....................
   If somehow, please explain....................................................................................................
   ................................................................................................................................................
   ................................................................................................................................................
   No......................................

5. IBLI buying points are easily accessible
   Yes..........................
   No........................  
   If yes how far are they from your village? ...........................................................................
   ................................................................................................................................................
   ................................................................................................................................................
   Somehow (up to some point)....................
   If somehow, please explain....................................................................................................
   ................................................................................................................................................
   ................................................................................................................................................
   No......................................
   If yes how far are they from your village? ...........................................................................

6. Indicate any other opinion you may have about IBLI (the evaluator to list them all)
   i) ..............................................................................................................................
   ii) ..............................................................................................................................
   iii) ..............................................................................................................................
   iv) ..............................................................................................................................