

Participatory Epidemiology



- ≡ Participatory Epidemiology
- ≡ Things to concern when conducting PE
- ≡ PE preparation & steps
- ≡ Summary

Participatory Epidemiology



What is participatory epidemiology?



Participatory Epidemiology (PE) is an emerging branch of veterinary epidemiology.

- ☐ Based on principles and methods of Participatory Rural Appraisal (PRA) Focusing on animal health issues.
- ☐ Working with communities to study specific disease problems and identify best-fit solutions.
- ☐ Using for improvement of information reliability; standardized and repeated.

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Approaches and Methods for PE

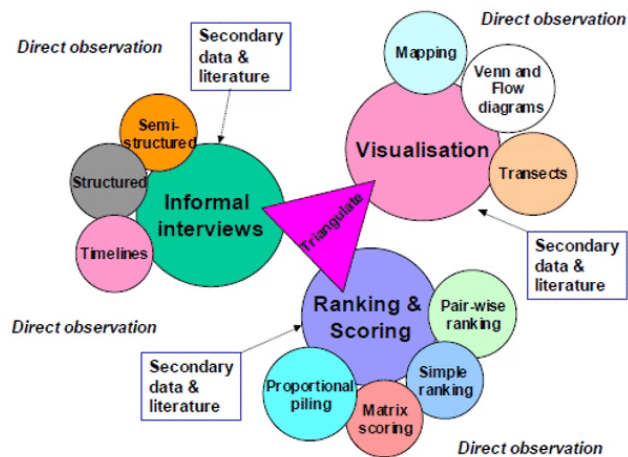
Successful PE use requires attention to the attitude and communication skills of practitioners, plus the correct application of specific PE methods.

PE methods can be categorized into 3 main groups;

- **Informal interviews**
- **Visualization methods**
- **Ranking and Scoring methods**



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Participatory epidemiology is the use of participatory methods to improve understanding of animal health issues.

Key features are summarized below:

- Attitudes and behavior

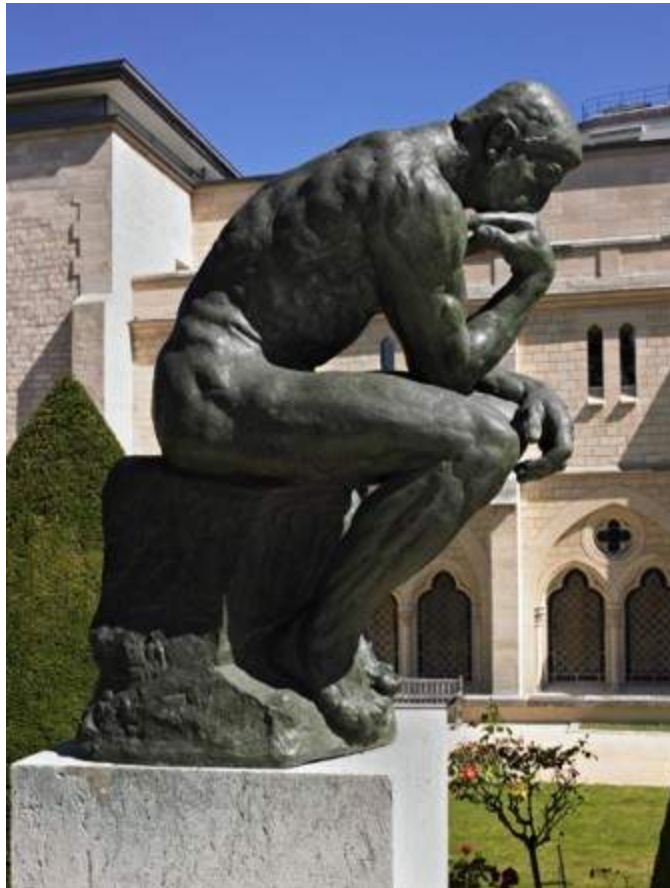
- Combined methods and triangulation
- The use of key informants Action – orientated
- Methodological flexibility, adaptation and development

Source: <http://www.fao.org/docrep/007/y5510e/y5510e0p.htm>

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Things to concern when conducting PE

Things to concern when conducting PE



Source: <http://www.musee-rodin.fr/en/collections/sculptures/thinker-0>

1. Attitudes and behavior for PE

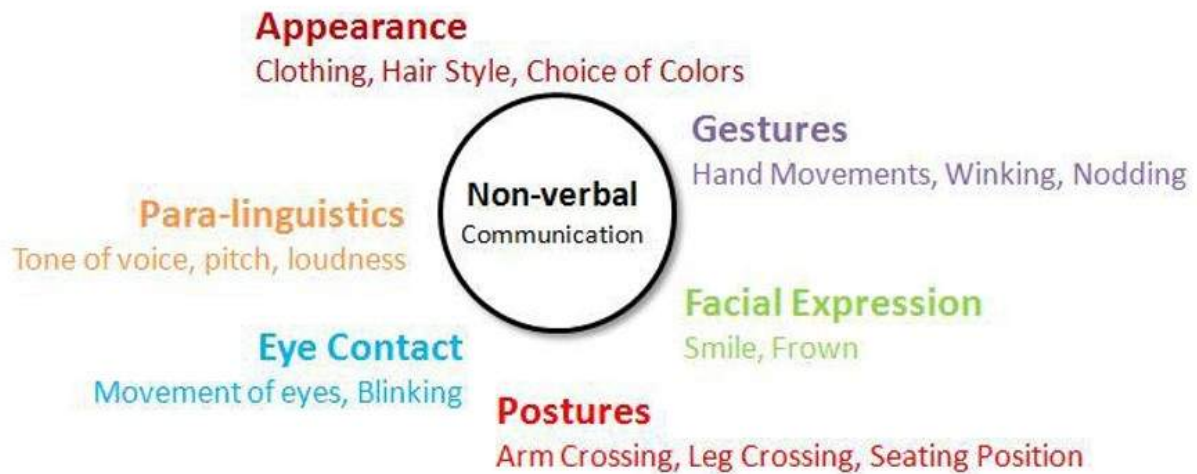
- The important aspect of participatory approach is the way we interact with other people.
- The interaction determines the relationship and trust between researcher and local people, and affects the types of issues and information that people are willing to discuss in an open manner.
- The outsider must be constantly aware of their own attitudes and behavior.

Indigenous knowledge VS Scientific knowledge



CONTINUE

2. Verbal & Non verbal communication



Source: <http://www.viaggiovagando.com/2014/06/23/part-culture-play-verbal-non-verbal-communication/>



IT'S WHAT YOU **DON'T SAY** THAT COUNTS!



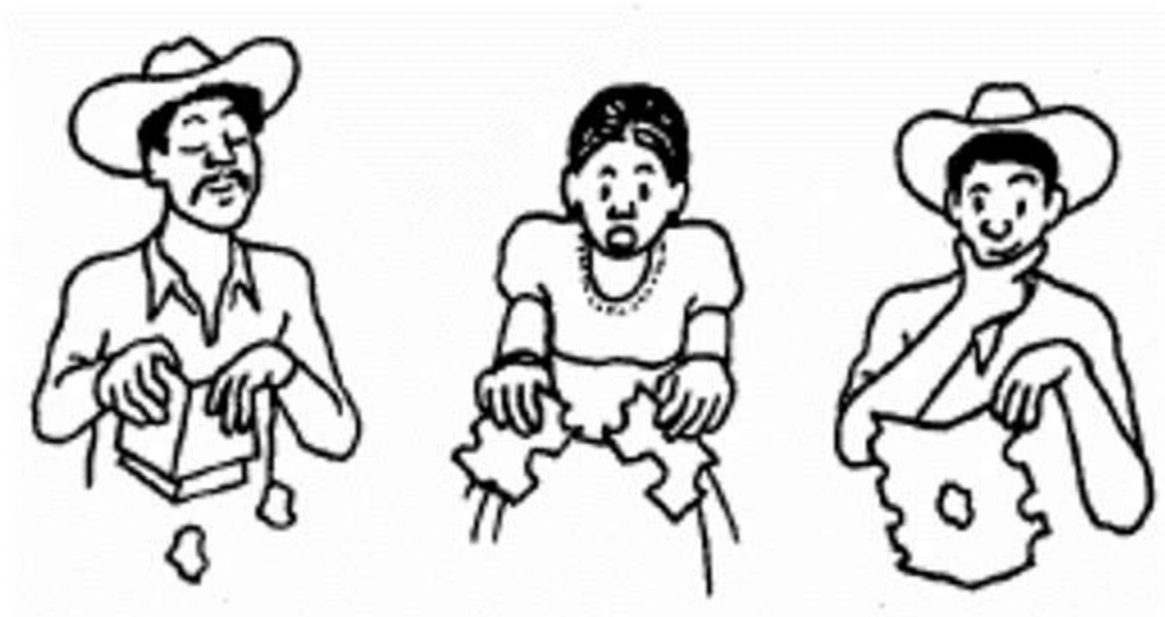
LEARN TO **READ** AND **INFLUENCE** PEOPLE THROUGH **NONVERBAL** COMMUNICATION.

Source: <https://openanswer.wordpress.com/tag/non-verbal-communication/>

CONTINUE

3. The important of clear instructions

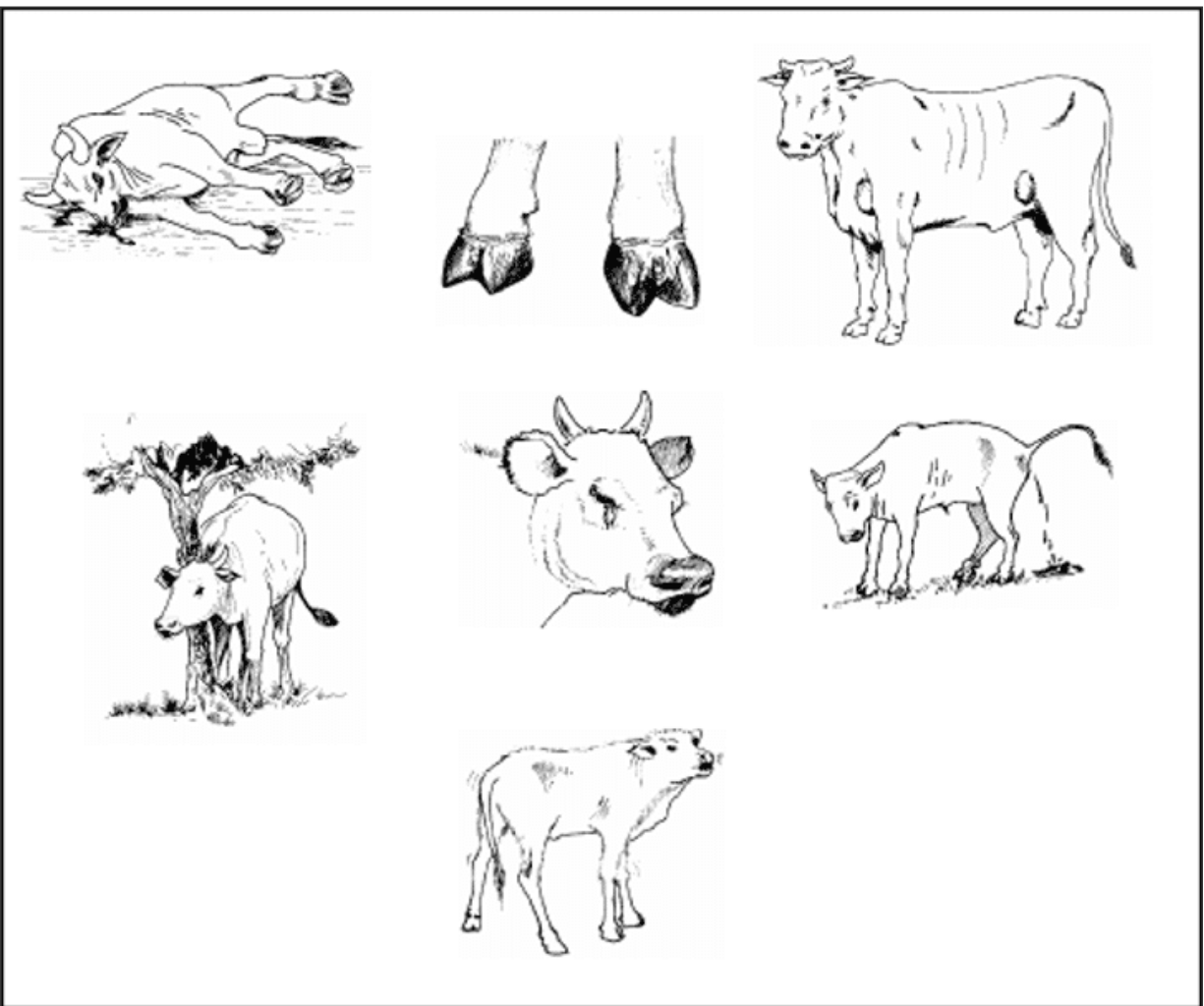
The folding paper game

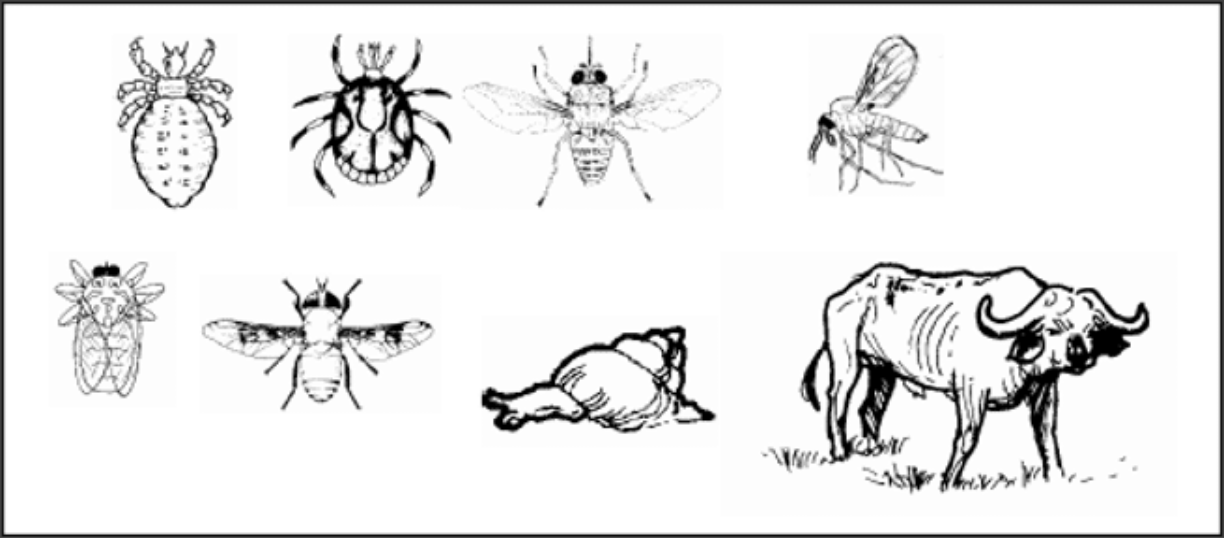


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4. Using picture and other aids

Example pictures of clinical signs





Cause of diseases

CONTINUE

5. Dealing with dominant talker

- Divide the group into smaller group and disperse the groups to different places
- Direct questions at particular individuals. If the dominant talker interrupts, says something like **“Thanks for your useful contribution. We can now hear what other people have to say”**

- Assign a physical task to the dominant talker to distract them
e.g., visit his/her animals
- Stop the discussion and resume later
- Make the dominant talker part of the team



CONTINUE

PE preparation & steps

PE preparation & steps

1. Clarify topic and objectives
2. Stakeholders and entry points
3. PE team: facilitator, note taker and observer
4. Checklist
5. Conduct PE: data collection and triangulation
6. Data analysis



- **PE team**

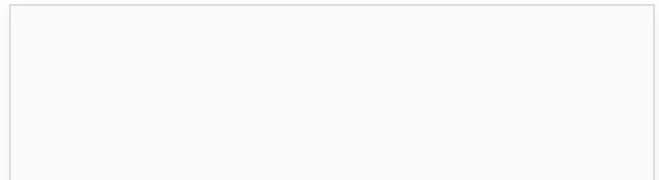
- Facilitators
- Note taker
- Observer

- **Participants**

- Key informants (definition....)
- Stakeholders

Some methods for PE

Click ↻ to reveal PE methods suitable for information required



Any information

Informal interview

Social organization

Natural resource maps, Venn
diagram

Relative livestock ownership

Proportional piling

Animal husbandry

Seasonal calendar, Transects

History of livestock diseases

Time line

Livestock disease priority

Scoring

Livestock disease and impact
on livelihood

Matrix scoring

CONTINUE

Mapping



- Geographical boundaries of the community
- Main human settlements
- Road and main footpaths
- Rivers, wells and other water resources
- Farm area, forest and other natural resources
- Services
- Ethnic groups
- Others eg., seasonal movements, high risk area

CONTINUE

Seasonal calendar

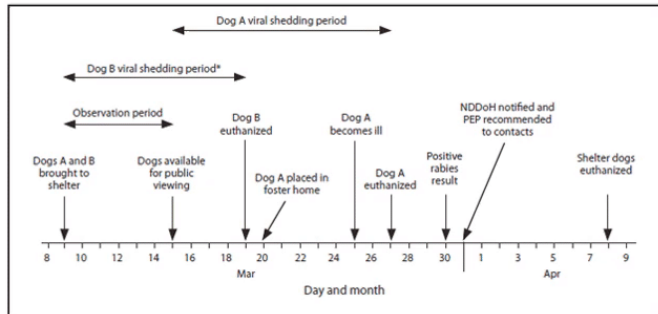
EXAMPLE

ACTIVITIES	Months											
	1	2	3	4	5	6	7	8	9	10	11	12
Rice farming					←					→		
Harvest wood for sales	←		→						←		→	
Fishing in trapaengs & channels	←				→					←		→
Collect tree husks		←	→									
Harvest timber for house construction	←		→								←	→
Chicken & pig raising	←											→
Presence of more birds in trapaengs				←	→						←	→
Presence of mammals in the forest						←	→					
Cattle farming	←											→
Festivals and ceremonies	←	→		←	→	←	→					
Collecting NTFPs	←	→	←					→	←			→
Shortage of food									←	→		
Garden planting (corn, cucumber etc)						←	→					



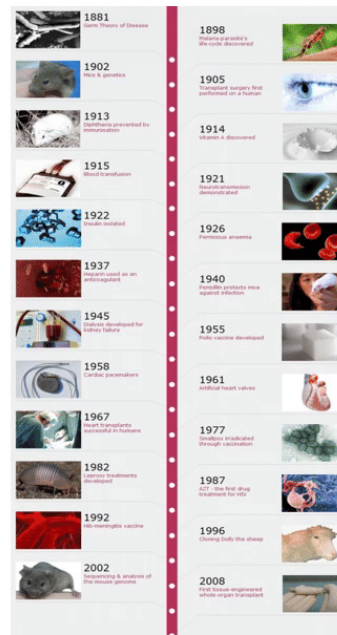
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Time lines



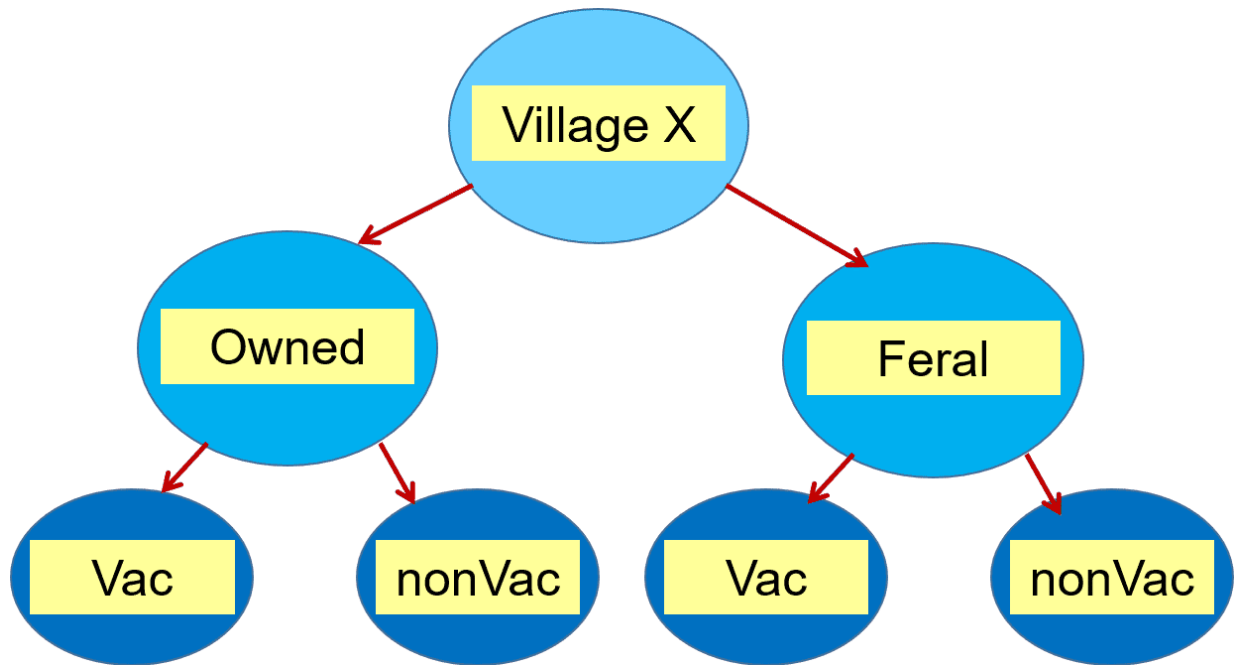
Source: <http://speakingofresearch.com/facts/medical-benefits/>

Source: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5951a2.htm/>



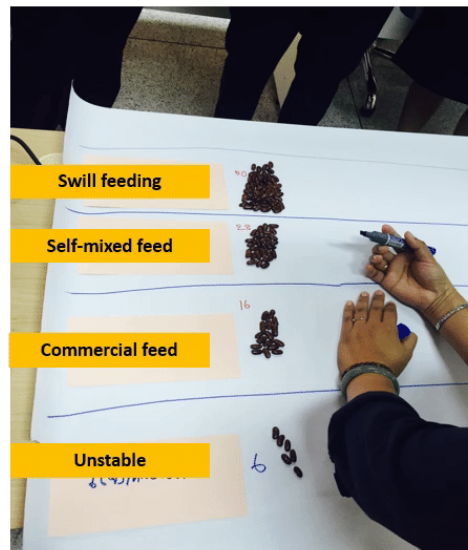
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Diagram



CONTINUE

Proportional Piling & Ranking



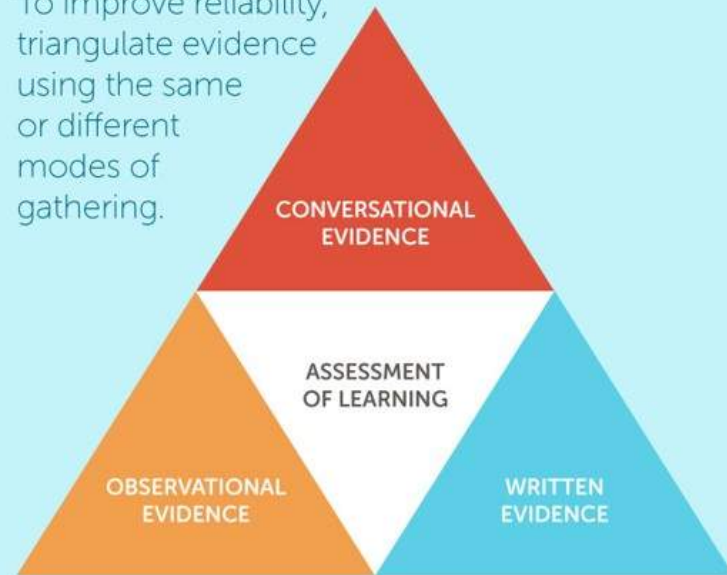
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What is triangulation?

SUMMATIVE

gather evidence
to certify proficiency
and understanding

To improve reliability,
triangulate evidence
using the same
or different
modes of
gathering.



(Source: <https://www.freshgrade.com/blog/what-is-triangulation-in-the-assessment-context/>)

CONTINUE

Summary

- ☐ PE involves working with communities to find information about disease outbreak and identify appropriate responses.
- ☐ There are three groups of PE methods i.e. informal interviews, visualization and ranking/scoring methods.
- ☐ Successful PE requires attention to the attitude and communication skills and the correct application of specific PE methods.

References



1. [OIE SEACFMD field outbreak investigation manual](#)
2. <http://www.fao.org/docrep/007/y5510e/y5510e0p.htm>
3. The ASEAN Veterinary Student Volunteer Project 2019 (AVVP 2019). The Faculty of Veterinary Medicine, Kasetsart University (KU), Thailand.

Congratulations - end of lesson reached

Go back to our outbreak scenario (Event 5d) and complete

Task 2

