Australian National University

Fasciola Control Policy for Smallholder Production

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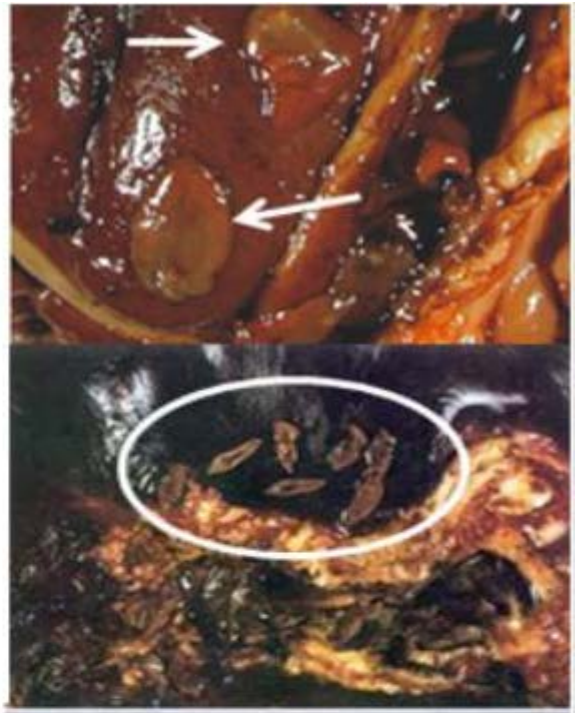
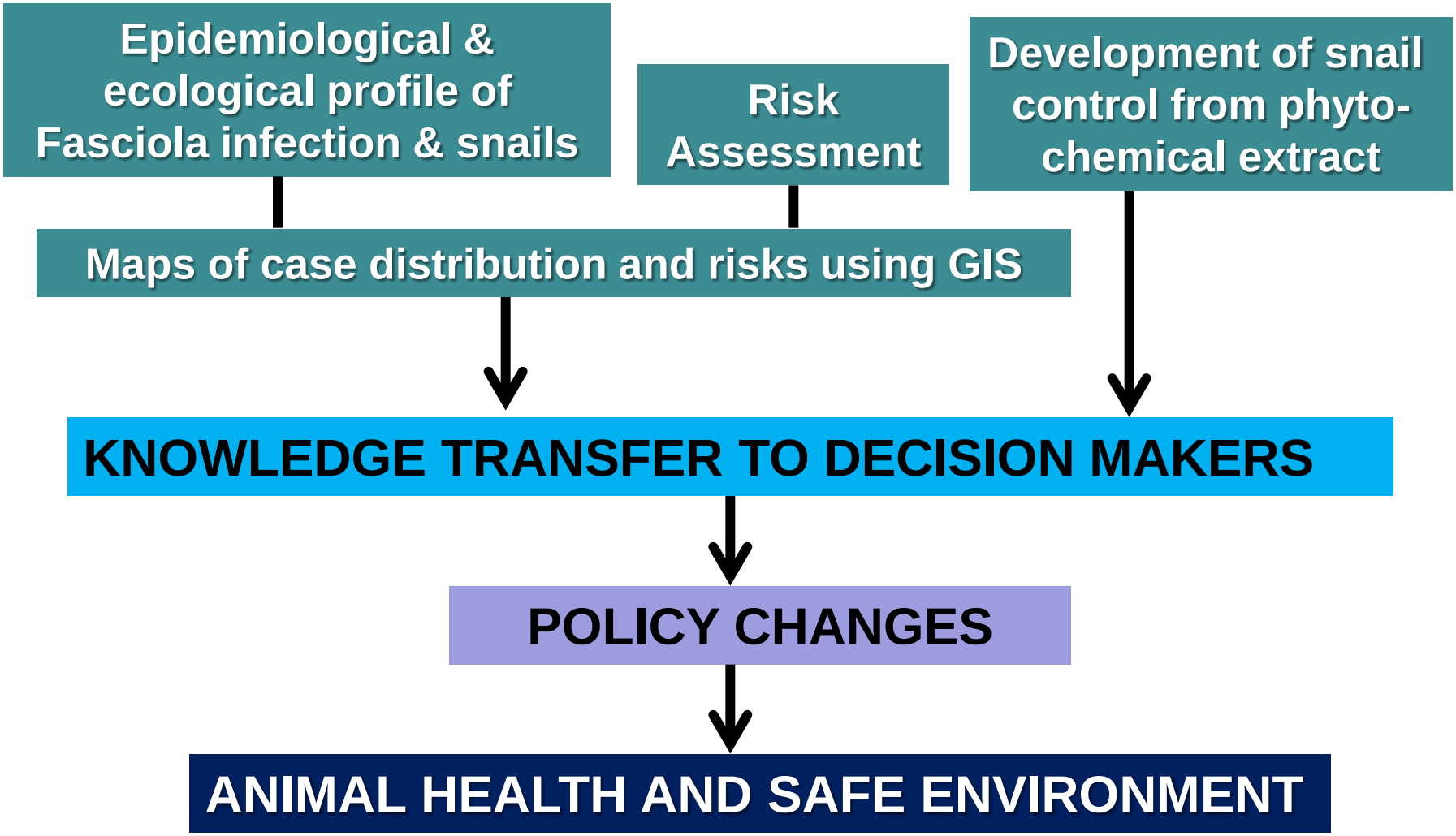
Fasciola

- flat, leaf-shaped worm
- affects the liver
- requires a snail to complete its life cycle
- the infectious phase of the worm is released by the snail into the water and become attached to the submerged part of water plants
- animals get infected by ingesting the contaminated part of the plants
- "**fasciolosis**" is the infection



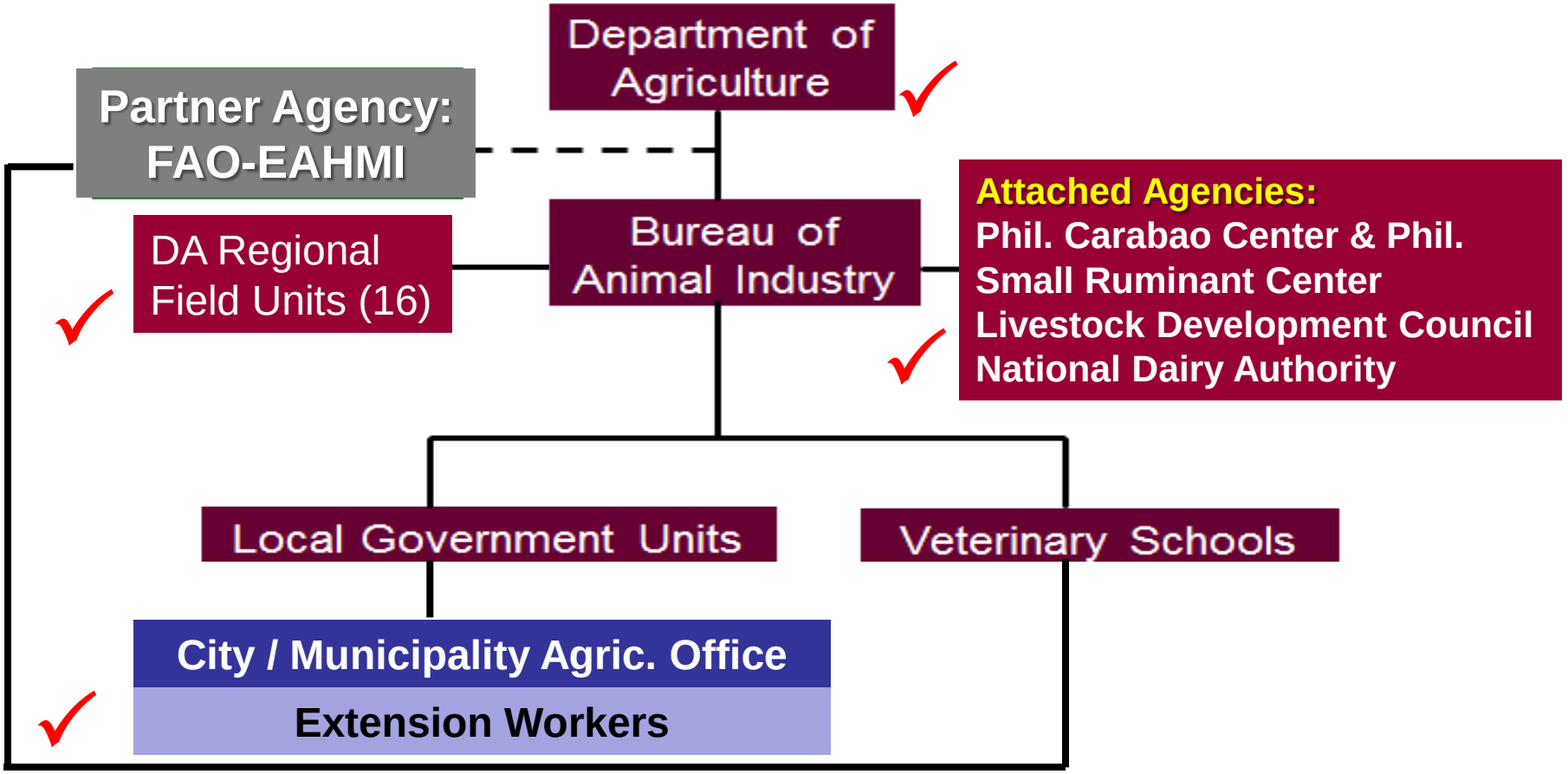
Aim of research to policy:



Beneficiaries

- Smallholder farmers
- Agricultural extension workers
- Provincial, city and municipal veterinarians

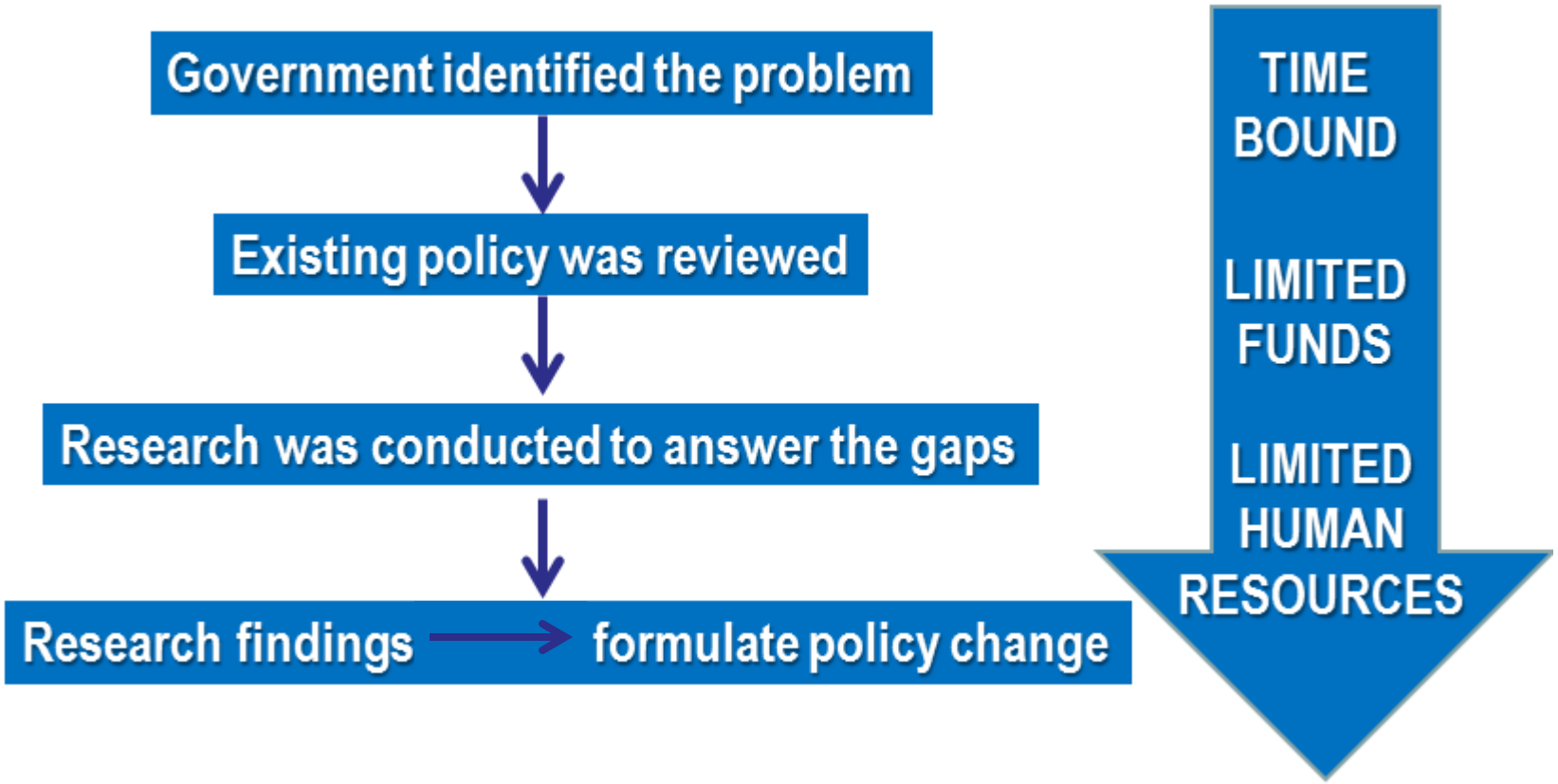
Systems View



✓ Stakeholder involved in the policy recommendation

APPLICABLE POLICY MODEL:

Bounded-Rationality Model



Scoping	Boundary Setting
Department of Agriculture – identified increasing Fasciola fatalities among ruminants	Vet. Academe – delivered research outputs within time frame
International Organization – funded a research on control of the disease	International Organization – organized stakeholders and decision makers for research output presentation
Veterinary Academe – conducted the research	Government & stakeholders (not included in the research team) – revised and adopted policy changes
Stakeholders (not included in the research team) – synthesized all information from the research output	

Framing

Infected goats: thin, unproductive

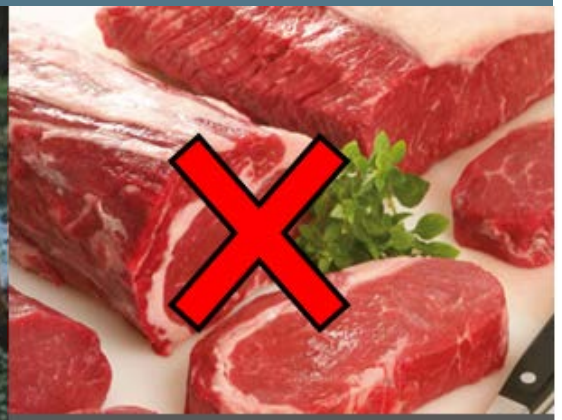
Low milk and meat production

No money for children's education.

Framing

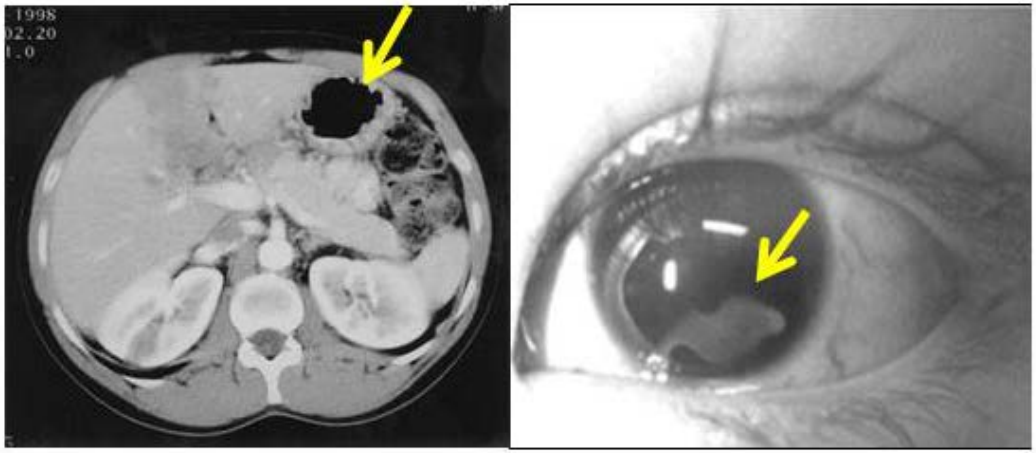
Infected cattle & buffaloes: thin, unproductive

Reduced draft power



Low meat production

Low milk production



Taking Values into Account

- Smallholder farmer

  Promote self-reliance and responsibility among smallhold farmers in upholding health and welfare of their animals.

- Department of Agriculture & LGU Vets

  Promote health and welfare of animals and promote farmers' welfare.

Harnessing good differences	Managing bad differences
• Researchers and policy makers worked together to come up with policy on Fasciola control	• Emphasized impact of uncontrolled fasciolosis on animal productivity & family income
• Involved multi-sectoral agencies for promotion of and education on *Fasciola* control	• Synchronized timeline differences among stakeholders, researchers and policy makers

HOW

CLSU-CVSM *Professor and Collaborator on Fasciola Study, Dr. Clarissa Yvonne Domingo presenting the findings/results of the study.*

DIRECT COMMUNICATION

I provided the information from the Fasciola research to stake-holders in coming up with recommendations towards policy formulation.

WHO

I served as the **project leader** of the research team on Fasciola control conducted 2011 until 2012 and funded by the FAO- EAHMI.

FAO-EAHMI organized the workshop/meeting with influential stakeholders to come up with recommendations for Fasciola control policy in smallholder production.

WHO	WHEN
Stakeholders (not part of the research team) 1. Staff, Bureau Animal Industry 2. Provincial and City Veterinary Office of Nueva Ecija 3. Department of Agriculture Regional Field Unit III 4. Dept. of Agric. Regional Animal Disease Diagnostic Lab. III 5. Phil. Carabao Center 6. Vet Faculty colleagues	(March 2012) Research findings were used after it was completed to come up with recommen-dations for Fasciola control policy formulation

Overall context

- Fasciolosis is the most frequently recorded animal disease in the country with over 6,000 records of more than 267,000 cases during the period: 1997-2004 (EAHMI, 2008).
- Responsible for major economic losses to smallholders in the country (EAHMI, 2008) between US$20-107 million in countries where it is prevalent such as the Philippines, Cambodia and Indonesia (Spithill *et al.*, 1999)
- A joint study of Environmental Animal Health Management Initiative (EAHMI) and the Environmental Research Group Oxford (2007) provided a baseline and predicted fasciolosis distributions in the Philippines with highest in lowland cultivated areas, such as Nueva Ecija in Central Luzon, due to large irrigated areas for rice production.

Authorization

- An existing Letter of Agreement between FAO-EAHMI and the College of Veterinary Science and Medicine at CLSU gave me the authorization to conduct the research on Fasciola control.

Organizational Facilitators

Government (DA-BAI)

- Recommended my university to the funding agency to do research.

Funding agency (FAO-EAHMI)

- Provided the funds for the research
- Provided a GIS expert to make maps
- Organized a meeting with stakeholders to present the research output and to come up with recommendations for policy change.

University

- Supported the signing of the Letter of Agreement between the funding agency and the University
- Veterinary undergraduate students were available to do surveillance.

Organizational Barriers

- Government and University bureaucracy caused delays in the release of funds.
- Release of funds was 10 months delayed from the start of the research conduct.
- Settlement of used and unused funds was time consuming.

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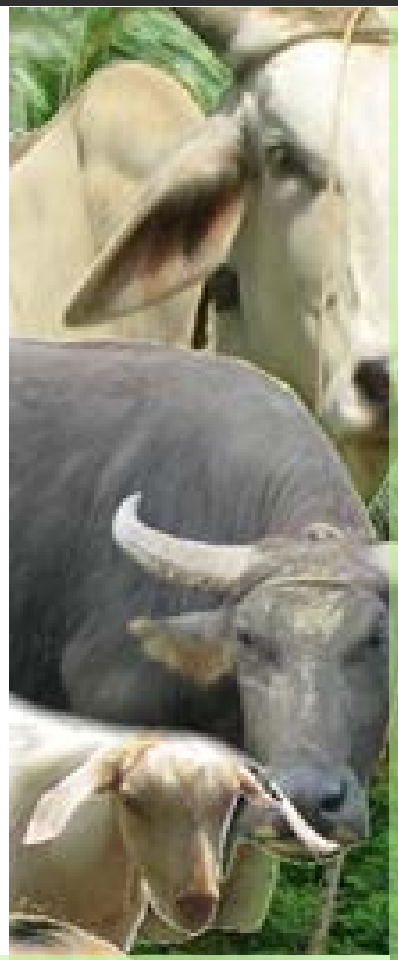
OUTCOME: CHANGES IN POLICY



Small hold farmers have more access to:

1. veterinary services by joining cooperatives.
2. strategic snail control by knowing:
   - an alternative choice to a cheap and effective phytochemical snail control.
   - which water bodies are potential sources of transmission due to presence of infected snails.
3. information on how to safeguard water bodies from getting contaminated by infectious animal manure
4. strategic deworming program thru cost-effective laboratory examination of their animals.
5. trainings sponsored by local gov't unit vets on pasture and forage development
6. information on how to select safe parts of aquatic forage to protect their animals from getting infected.

EMPOWERING SMALLHOLDER FARMERS ON FASCIOLA CONTROL

Squeeze out as much information as you can, by appreciating the situation accurately.

Good Day!