



Implementing national LITS systems: EU Perspective

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AGENDA

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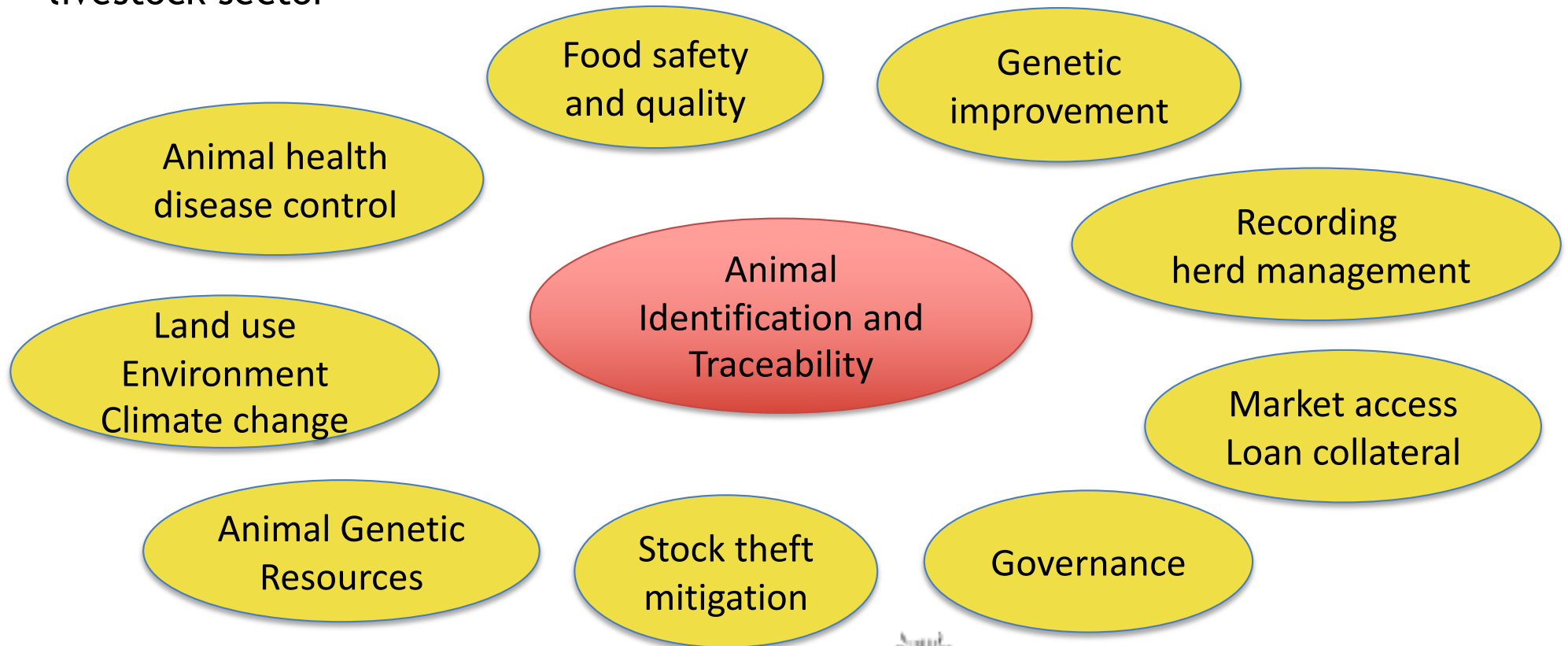
- Introduction - initial purposes/drivers
- Brief overview on LITS components
 - Key elements & additional functionalities
- Example EU for cattle, sheep & goats
- Key challenges faced
- Key lessons learned
- Benefits gained from the systems developed
- Global trends



INITIAL PURPOSES AND DRIVERS

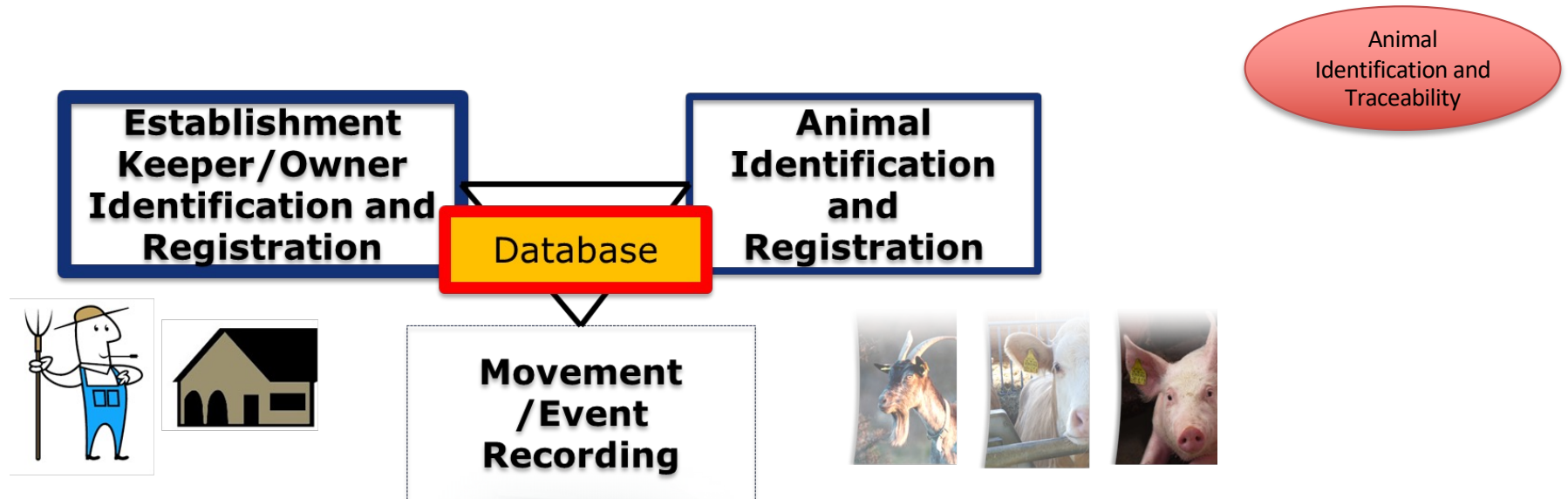
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LITS offers multiple chances to manage and improve different fields of the livestock sector



KEY ELEMENTS

The core subject and key elements of a LITS are



SYSTEMATICS FOR LITS SCHEMES

Animal Identification and Traceability			
(1) Registration of Establishments (2) Animal Identification and Registration			
Key characteristics	(3) Form of ID	(4) Registration of birth and movements	Additional features
Type I Intensive	Individual ID	Recording from birth to exit (slaughter, death)	(5) Replacement device (6) Animal document (7) Animal Inventory (8) Establishment register (9) Inspection
Type II Advanced	Individual ID	Recording starting with departure from birth farm to exit (slaughter, death)	
Type III Intermediate	Individual ID	Recording starting with entering special holdings or markets to exit	
Type IV Light	Group ID	Recording starting with departure from birth farm to exit (slaughter, death)	
Type V Basic	Group ID	No recording of movements during animal lifetime, reporting of death or slaughter	



OPTIONS FOR LITS I

(1) Registration of locations /stakeholders - what is the reference unit? - which actors are included?	<ul style="list-style-type: none">• Location or geographical area• Holding/establishment/Village/Market• Epidemiological unit(s), zones, common grazing areas
	<ul style="list-style-type: none">• Keeper and/or owner• Dealers, Transporters
(2) Animal ID + Reg. of animals - Who does it? - Data capture?	<ul style="list-style-type: none">• Veterinarian, Keeper / Owner, Agent
	<ul style="list-style-type: none">• Electronically by devices or paper forms• Location of data entry• Offline or online



OPTIONS FOR LITS II

(3) Form of ID - Device Type? - Identification? - Ear tag marking	<ul style="list-style-type: none"> • Visual • EID (ear tag with transponder, injectables, bolus) • Tissue Sampling Device
	<ul style="list-style-type: none"> • Single identification • Double identification
	<ul style="list-style-type: none"> • Country code + x digits • Official number with establishment code
(4) Movement Recording?	<ul style="list-style-type: none"> • Single registration of move-off and move-on • Joint registration of move-on and move-off (from the seller or buyer) • Electronic movement certificates
(5) Replacements?	<ul style="list-style-type: none"> • Identical Code / New Code • Notification in central database / on-farm register



OPTIONS FOR LITS III

(6) Animal document	<ul style="list-style-type: none">• Issued centrally (produced by database or on-spot) or established locally• Permanent, for the lifetime of one animal (passport)• Temporary, for several animals (movement permit)
(7) Animal inventory	<ul style="list-style-type: none">• Frequency• Categories of animals (species, age, production type)
(8) Establishment register	<ul style="list-style-type: none">• Pre-defined paper form or electronic application
(9) Inspection	<ul style="list-style-type: none">• Control objects (farm, transports, movements)• Inspected control objects per year• Risk based (based on risk analysis) or random• Announced or unannounced• Fines, cross-compliance checks



EXAMPLE EU (Bovine)

- New legal base pursuant to Regulation (EU) 2016/429 and Commission Delegated Regulation (EU) 2019/2035.
- Mandatory national schemes, **Type I Intensive**
- Identification within 20 days after birth on the establishment of birth, double identification (2 x Visual or Visual/EID), identical replacements
- Registration deadline 7 days after identification or for the movement or death of the animal
- Identification document when moved between EU member states
- Inspections including cross-compliance checks
- National databases with affiliated databases for different purposes such as recording, breeding, premium payment and others



EU (Bovine, Ireland)

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- The Irish Bovine Animal Identification System has four elements: tagging, bovine passport, on-farm bovine herd register and a computerised database.
- The tag set may consist of a yellow visual tag with a tissue sample for BVD testing (mandatory) and a white HDX electronic tag (mandatory) with a tissue sample tube for genotyping (not mandatory).



EU (Ovine, Caprine, for reproduction)

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- Animals not intended to be moved directly to slaughterhouse before the age of 12 months are to be identified
 - (a) by a visual tag
 - (b) by an electronic device: electronic ear tag, ruminal bolus, injectable transponder, electronic pastern band
- To be applied in the establishment of birth within 9 month after birth
- New replacements
(notified in establishment register)
- Mandatory Scheme, **Type II Advanced**





Example EU (Ovine and Caprine, slaughter animals)

- Animals intended to be moved directly to a slaughterhouse before the age of 12 months are to be identified with a visual tag in one ear either:
 - the unique registration number of the establishment of birth; or
 - (b) the identification code of the animal.
- To be applied in the establishment of birth within 9 month after birth
- Mandatory Scheme, **Type IV Light**



KEY CHALLENGES



Challenges	Solutions
Weak Performance of the LITS (delayed and/or uncompleted movements, ghost animals, quality of tags)	Implement a routine monitoring and quality improvement process (check for ghost animals, monitoring loss rate etc)
Administrative burden	Keep field processes simple and robust (tagging, numbering system, procurement of tags)
Hesitation of farmers	Involvement from the beginning Sensitisation before and during roll-out Create more benefit, create additional use cases and involve relevant stakeholders
Lack of financial means	Involvement of international donors Contribution of various stakeholders Financing of routine operation Public good input

KEY LESSONS LEARNED

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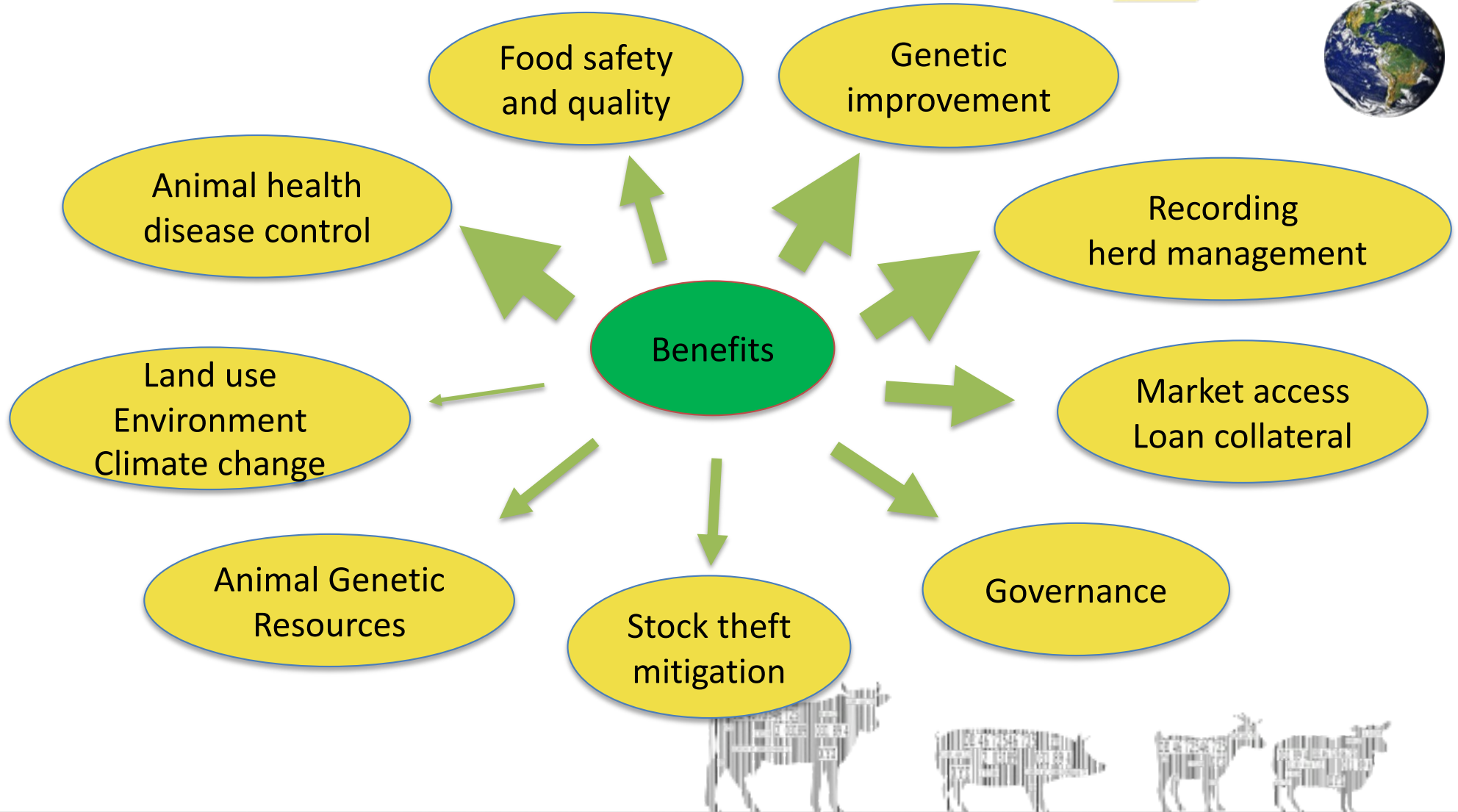


1. Establish separate LITS-unit with qualified staff
2. Make use of advanced digital opportunities to reduce administrative burden for livestock farmers and increase benefits
3. Develop regional and international network and share experiences
 - Management and Organization
 - Technical (IT)



BENEFITS GAINED FROM LITS

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GLOBAL TRENDS

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1. LITS are still “state of the art” for livestock traceability; all core components and functionalities need to be established
2. Devices: Modular combination of identification systems
- EID and tissue sampling (BVD, genomics) are increasing
3. Single official Identification, more emphasis on control of movements / transports versus control on farm
4. Tendency from national to international (ICAR certified) approved devices
5. EID combined with sensor technologies offers new opportunities in intensive livestock production systems



THE GLOBAL STANDARD
FOR LIVESTOCK DATA





Thank you for your attention!

