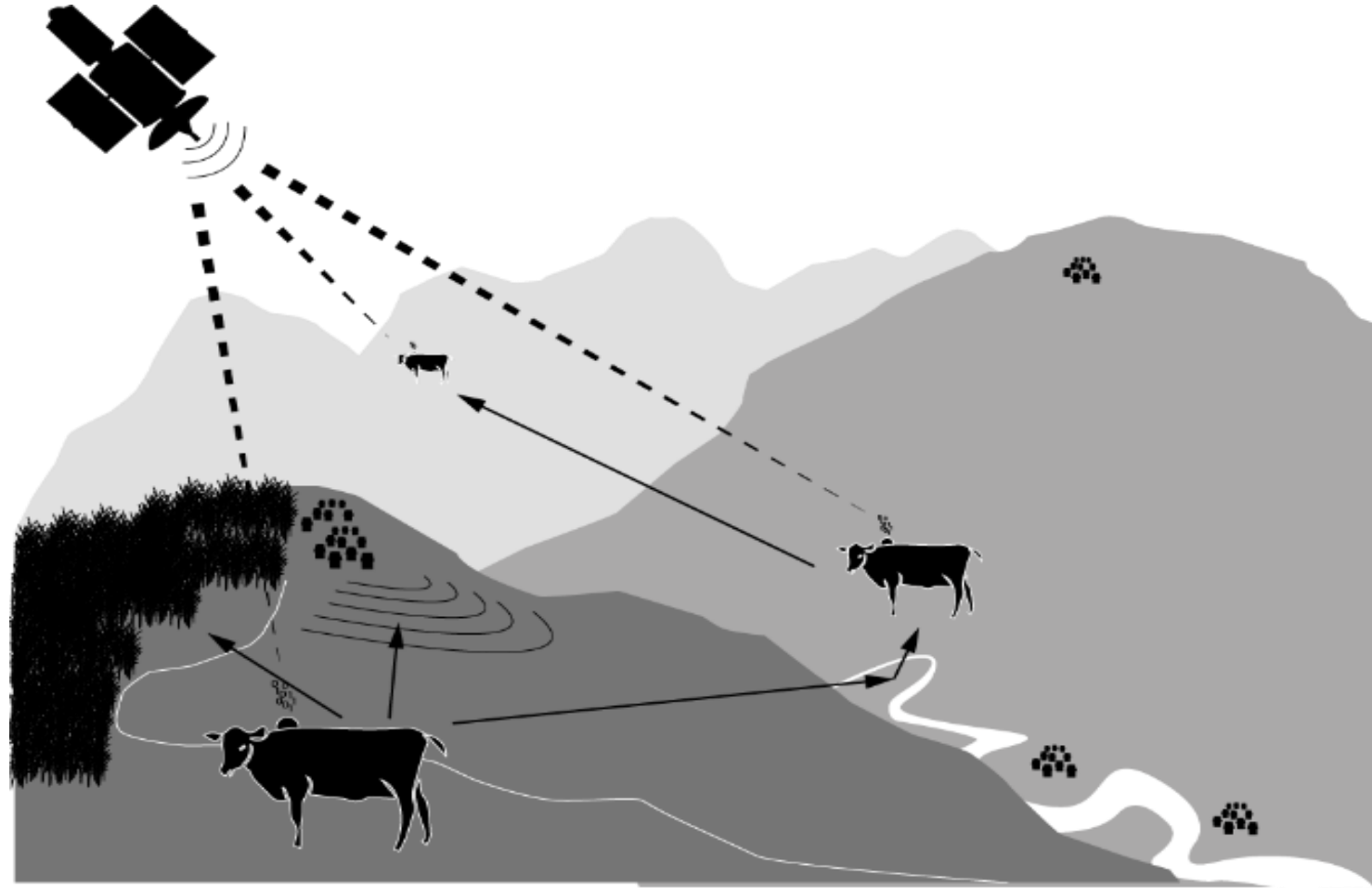


CatTrack-SEA

*Monitoring movements and
distribution of cattle in upland
landscapes of South East Asia*



Projet TAG



- Projet TAG “Trade-off and synergies of integrating intensive Livestock production with AGroecology in Mountainous regions”
- Small grant ACTAE
- 2017-2018
- Vietnam, Laos, Thaïlande
- CIRAD (Selmet, Aida, Astre), NIAS, University of Tasmania and Queensland
- Objective: Analyze with smallholders mixed farms and agricultural extension officers, the conditions for insertion of intensive livestock production in complex agro-ecological systems based on CA: trade off and synergies in terms of flows of biomass, use of space and resources, mobilizing simulation tools for the use of resources and space.



Context

- In mountainous regions
- significant population growth
- deforestation and extension of monoculture on the hill slopes
- Soil erosion and nutrient losses
- Conservation agriculture and agroecology proposed
- Expansion of intensive livestock production (beef cattle)
- Feed animals : upland pastures, natural forest and forage fields (animal mobility)
- Cattle and buffaloes hinder the development of conservation agriculture.
- How to improve the adoption of conservation agriculture and agroecology combining cattle breeding of the mountains of North Vietnam?

Five successive activities

1. Synthesis on production and use of forage, conservation agriculture and agroecology in Northern Vietnam and Laos
2. Diagnosis of the production and use of resources and spaces in farms and landscape in a village in Diên Biên and in Son La
 - Analyze on a diversity of farms and the practices of biomasses management in farms and territories
3. Multi-scale modelling for assessing trade-offs and synergies of integrating intensive livestock production and agro ecology options
 - Adaptation of a simulation tools of crop livestock integration in mixed farms systems
 - Co design of scenario and assessment
4. A preliminary study on cattle mobility (proposal CatTrack)
 - Design of GPS tracking devices and data management units
 - Test of GPS tracking system in various field conditions and with different methodologies
 - Prepare the setting up of a full proposal for a more comprehensive project on livestock mobility in SE Asia
5. Validation workshop of diagnostic results, co-design of technical and organizational solutions
 - To validate the diagnostic results, the analysis of trade off and synergies with stakeholders and to reflect on implementation scenarios

CatTrack-SEA

*Monitoring movements and distribution of cattle in
upland landscape of South East Asia*

CIRAD/KU/NIAS/NuOL



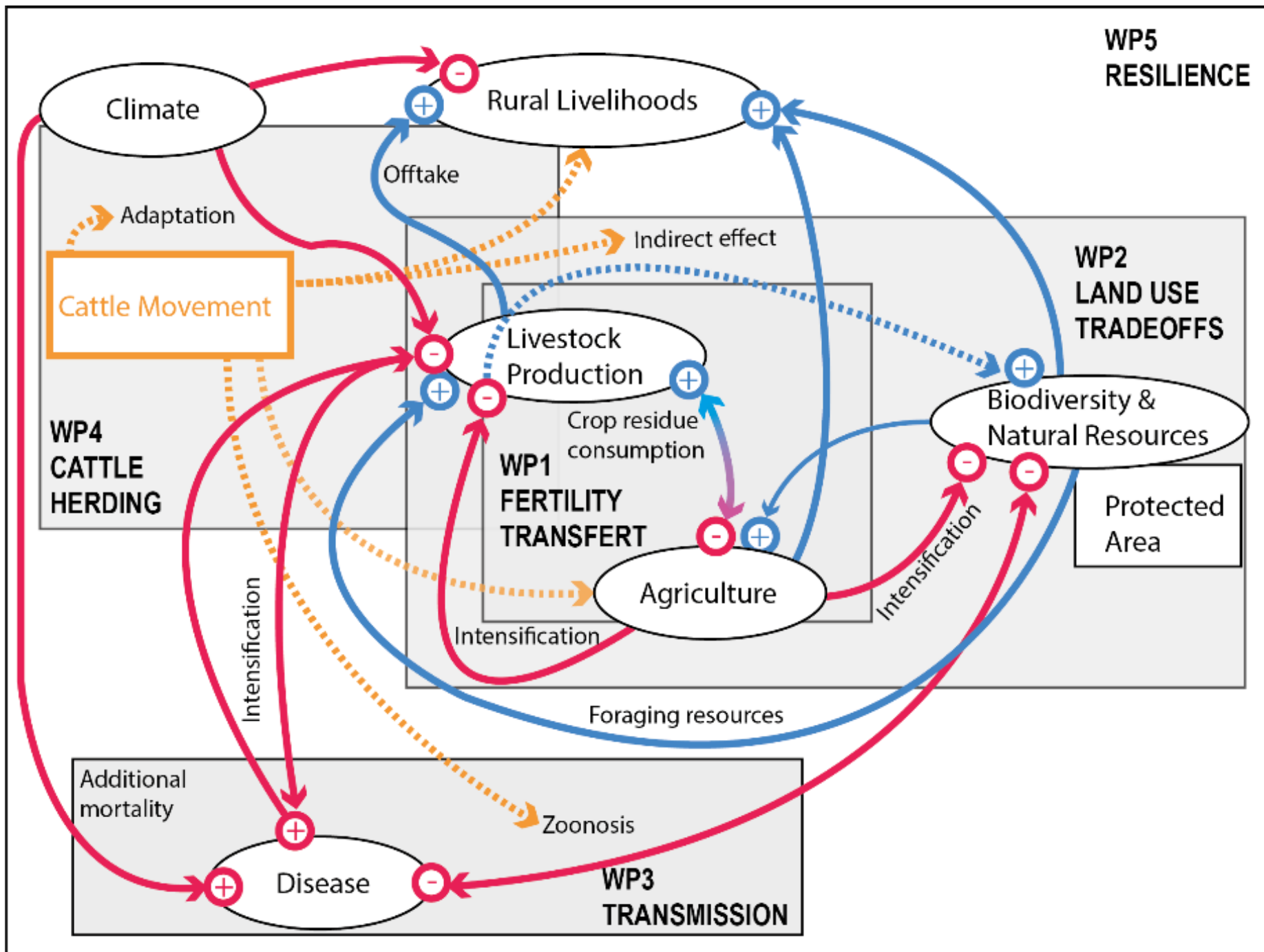
- Poor farmers in remote areas of SEA rely on traditional subsistence systems based on **mixed crop-livestock agriculture**
- Increasing land pressure and intensification of agriculture throughout SEA leads to increased **competition for land dedicated to livestock productions, to crop productions and to protected areas for biodiversity conservation**



- Extensive livestock production (cattle, goat, buffalo) rely on communal grazing involving **movements of animals at various scales in space** (from plot to landscape) and time (daily to seasonal)
- But we currently **lack quantitative information on livestock movements and their impacts** in agropastoral landscapes of SEA

→ Need for the **development of appropriate tools and analytical methods** to monitor and optimize livestock movements





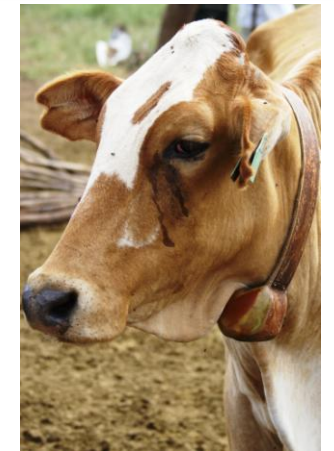
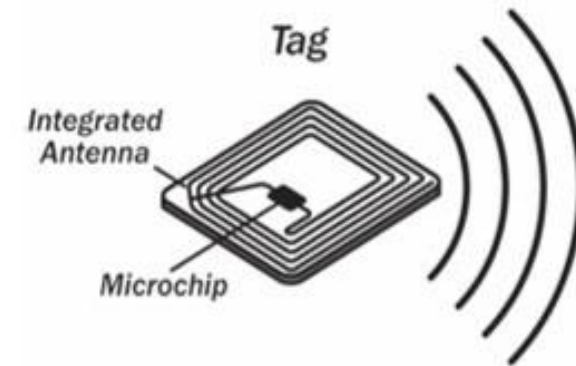
→ Need for the **development of appropriate tools and analytical methods** to monitor and optimize livestock movements

- **Partners and study sites**

- 1) CIRAD (ASTRE, SELMET, AIDA, GREEN)
- 2) KU (Vet Med, KU Engineer.)
- 3) TICA/HealthInterface; GREASE network
- 4) National Institute of Animal Sciences (NIAS)
- 5) National University of Laos (NUoL)



		Jan18	F	M	A	M	J	J	A	Sept18
1	Design of GPS tracking system and software									
2	Test of GPS tracking system in various field conditions and with different methodologies									
4	Prepare the setting up of a project on livestock mobility									



• **Internship SEAOHUN**



INTERNSHIP PROPOSAL



	CIRAD/Kasetsart University, Thailand
Title of the internship	Monitoring wildlife-livestock interfaces in Thailand: preliminary study of livestock movements in Salakpra no-hunting zone, Kanchanaburi province

SEAOHUN facebook at <https://goo.gl/hcT2Tq> ; Contact jutamart@seaohun.org

• **WP2_KU-Vet Faculty_grant#1/Dr S. Sripiboon**

→ Salakpra area; livestock sampling/screening for pathogens and vectors) ; 100.000 THB