# Adapting existing farm management tools to the local context of southern Mali

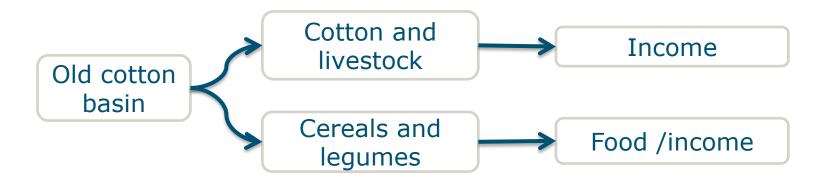
PhD research in progress

March 2019, Arouna Dissa





#### Research area: Koutiala



Crop-livestock interactions are key element of sustainability of the farming systems



#### Current trends

Land pressures

Declined soil fertility

Climate variability

Market uncertainty

Sustainable intensification

Diversification

Planning strategically farming activities

Use of farm management tools (FMGT)

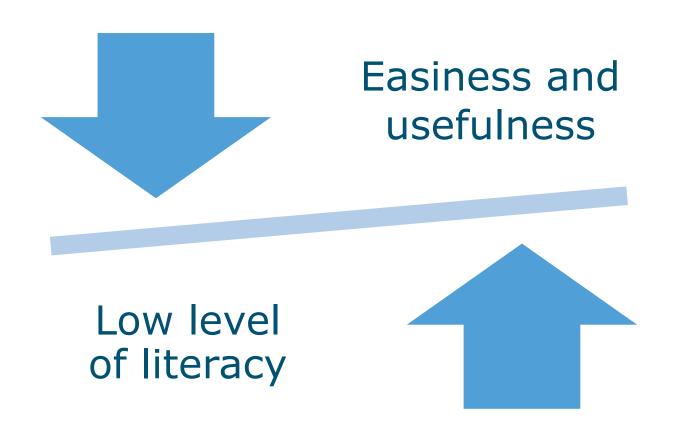


## Limited use of existing FMGTs

- One-size-fits-all tools → failure to address heterogeneity
- Low literacy of farmers → reliance on external support
- Top-down approach → only for transfer of technologies
- FMGTs elaborated in the 80's → changes not captured

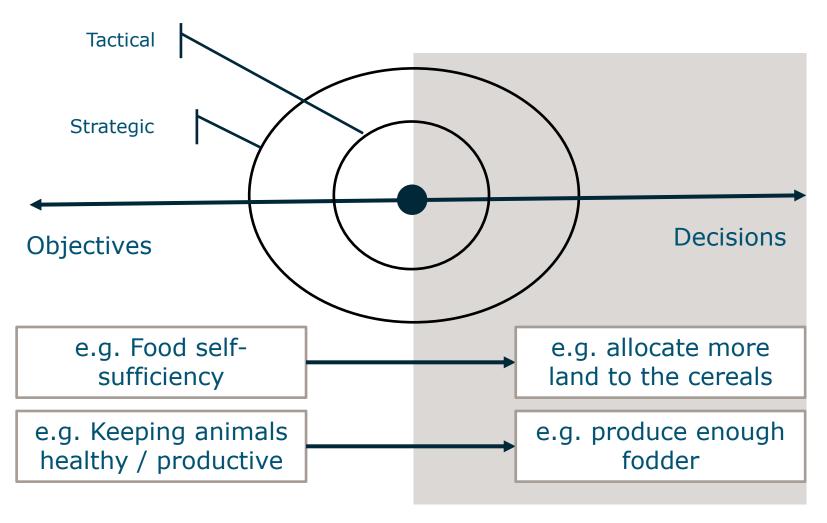


### Need to adapt existing FMGTs





## Adapt existing FMGTs





#### Research question and hypothesis

**RQ:** How can existing farm management tools be adapted to the local context of southern Mali so that they can be used autonomously by a producer in line with achieving strategic objectives?

**RH:** FMTGs that are adapted to the local context of southern Mali contribute to better decision-making of resource use to achieve strategic objectives.



#### Method

- Oliventory of existing tools;
- OInformation on key events/operations
- Resource endowments

Adapting existing tools

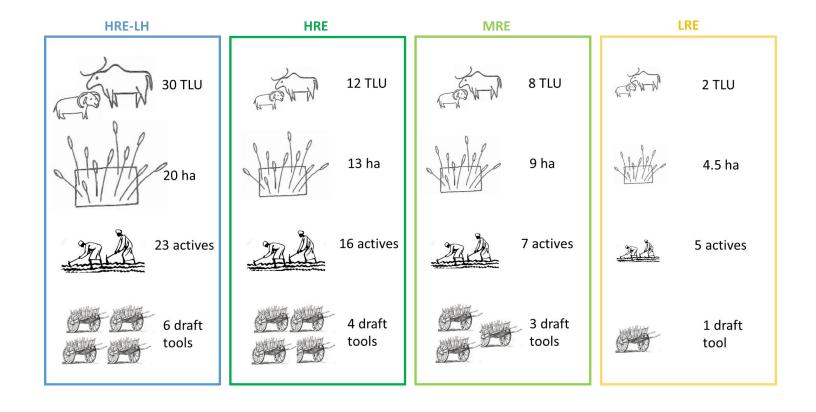
Testing of the adapted tools

Refining of the adapted tools

Feedback and planning for the coming season



#### Resource endowment

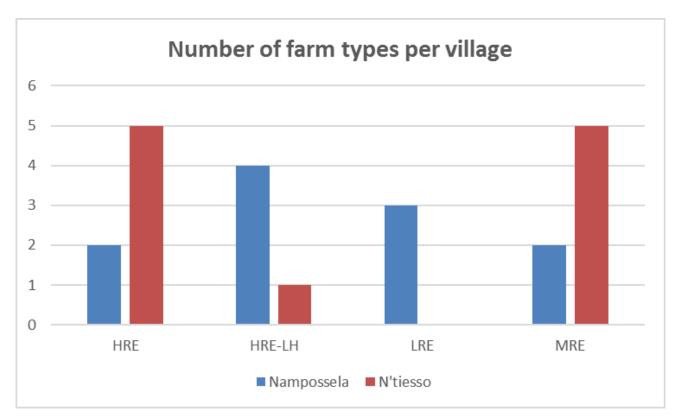


After Falconnier et al. (2015)



#### Sample of 2018-19 season

- 2 villages (Nampossela and N'Tiesso)
- 22 farmers selected using a typology (Falconnier et al. 2015)





#### Planning of activities: farm resources

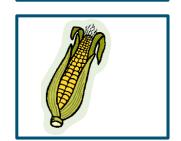














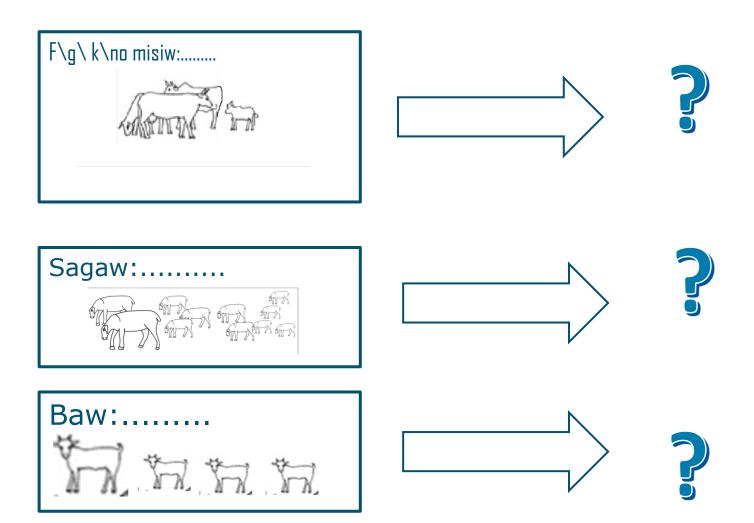








#### Planning of activities: farm resources



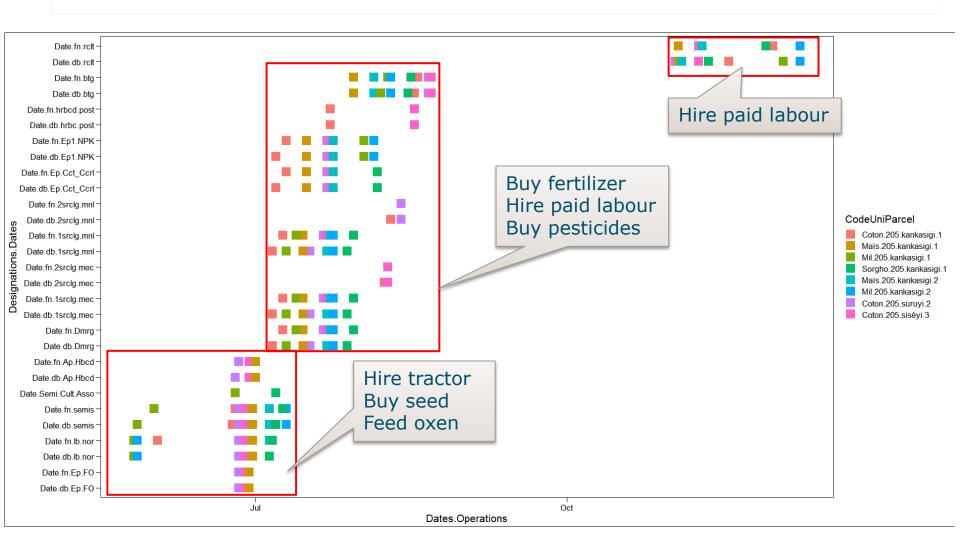


# Planning of activities: Objectives behind major cropping activities

- Peanut → income for payment of harvest labour
- Cotton → income and access to inputs of cereal
- Maize → mainly food for self-consumption
- Millet → food/income
- Sorghum→ food/income
- Cowpea → fodder



### Planning of activities using the calendar



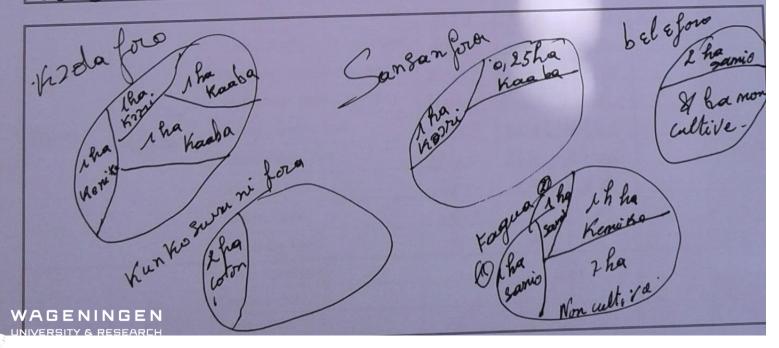


## Tools for planning of cropping activities

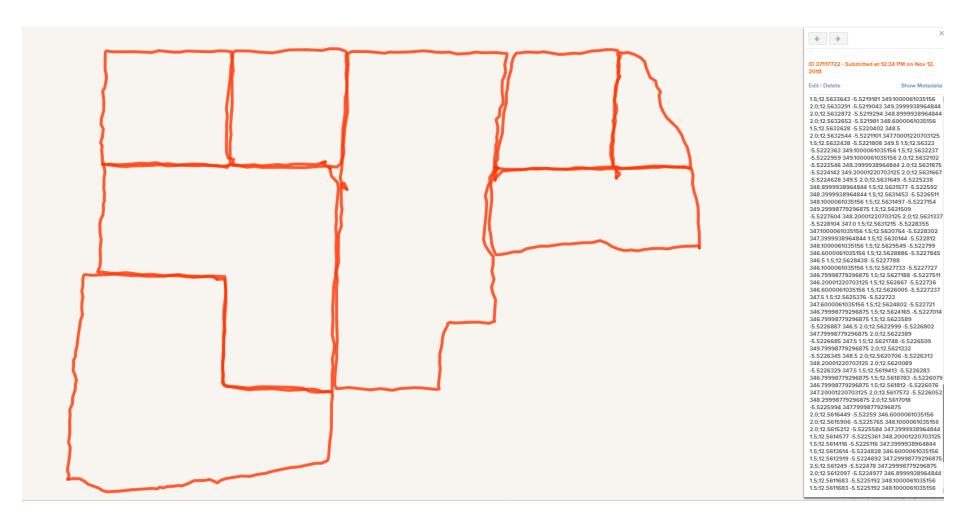
		Foro kenew		Foro 1lo	Foro 2n	Foro 3n	Foro 4n	Mume
Sɛnɛfen: Kɔɔri		Kεnε hakε (taari)						
		Dugu kolo suguya						
		Sɛnɛfen kɔrɔ saani kɔɔri						
Toli nogo laso ni boreme nogo		Toli nɔgɔ hake (wotoro)						
		Laso hakɛ (bɔrɛ)						
		Boreme nogo hake (bore)						
Foro kene laben		Dugu jalan ci	awɔ/ayi					
		Misiw laburu	awɔ/ayi					
		Terekiteri laburu	awɔ/ayi					
		Wala bo	awɔ/ayi					

## Follow up cropping activities

[F. ]	Dugukolo cogoya			Jiriw forow kono			
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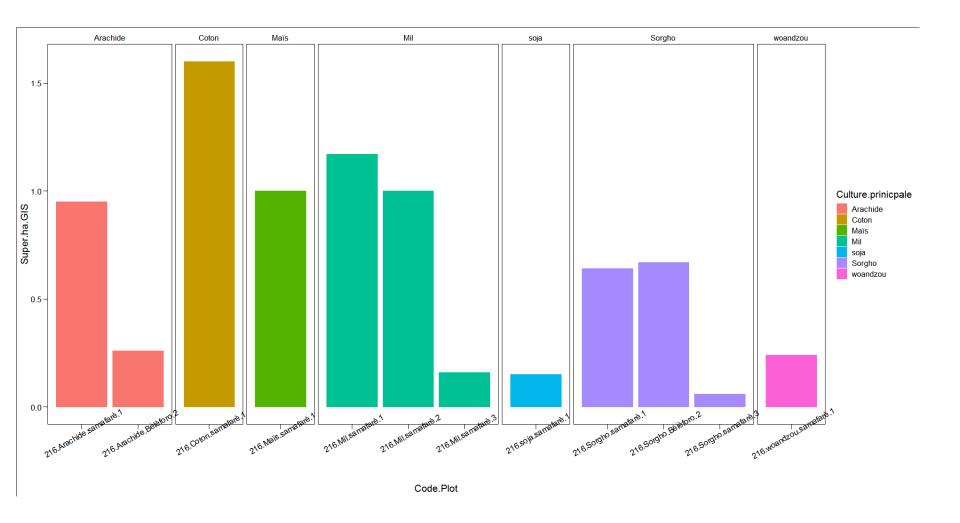


## Follow up: GIS data of plots





## Lesson: Planning helps diversification





# Thank you

Questions? Comments?



