

WATER GENDER INDICATORS IN AGRICULTURE: A CASE STUDY

CIRSDe

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SOME REFLECTIONS ON A WATER GENDER INDICATOR IN AGRICULTURE

- Water management projects *vs* technical issues...
- Women as farmers OR simply housekeepers?
- Inputs access: is it guaranteed both to women and men?
- Technology AND training (Quisumbing, 1996, 2006...)
- Complexity *vs* many indicators (i.e. Barbara Van Koppen, 2002; Tayyib et al., 2013)



THE MAIN QUESTIONS

- It is possible to standardize all this knowledge in few indicators to describe the gender (in)equalities in the water access and use in agriculture?
- The main problem: ‘genderized’ data availability from national to regional AND local level



METHODOLOGY

- External point of view
- Use of a case study (an agricultural development project in West Africa) ONLY to present the methodology
- Data collected through a semi-structured questionnaire
- Data collected and elaborated not on single individuals, but on association level (3 types of associations considered: Male/Female/Mixed)



TABLE 1. SUB-INDICATORS LIST (5 CATEGORIES)

Social	Age class	Education level	Technical training access
Land	Plot distance	Plot ownership	Plot distribution
Water	Water destination	Reservoir	
Water technique	Pump	Improved irrigation	
Economic	Agro_ prod selling	Purchase of inputs	



THE RESULTS 1

- Male/Female (or Mixed/Female) differences are represented by a ratio: more the ratio is close to 1, more 'gender' differences are not present
- Social capital *vs* women presence in water management associations
- Three “dark”/missing data



RESULTS READING

- **Green** indicates similarity among the groups (women/men and women/mixed)
- **Yellow** indicates problems that may arise in the future
- **Red** indicates the most critical aspects



***TABLE 2. THE INDICATOR CALCULATION
(THREE MISSING DATA)***

<u>Association</u>	<u>Women</u>	<u>Men</u>	<u>Mixed</u>	<u>Ratio</u>	
	%			<u>Women/Men</u>	<u>Women/Mixed</u>
18<age<50	na	na	na	na	na
At least I level education	na	na	na	na	na
Technical training	na	na	na	na	na



TABLE 2. INDICATOR CALCULATION (AVAILABLE DATA)

	Association	Women	Men	Mixed	Ratio	
		%			Women/Men	Women/Mixed
Land	Plot distance < 500 m (from the village)	0,58	0,92	0,59	0,63	0,98
	Group perimeter property (or village)	0,47	0,46	0,52	1,02	0,90
	Group plot distribution (not individual)	0,30	0,15	0,30	2,00	1,00
Water	Reservoir (to facilitate the irrigation)	0,53	0,69	0,57	0,77	0,93
	Mixed_water_use (domestic and irrigation)	0,74	0,69	0,67	1,07	1,10
Water Techn.	Pump present	0,51	0,92	0,85	0,55	0,60
	Improved irrigation system (drop or other)	0,07	0,54	0,46	0,13	0,15
Economic	Agricultural_product selling	0,65	0,92	0,93	0,71	0,70
	Input purchase	0,58	0,85	0,89	0,68	0,65

THE RESULTS 2

- High disparities between women and men associations *vs* likenesses between women and mixed associations
- **RED** *vs* water technology
- **YELLOW** *vs* land distance, land distribution, economic activities
- **GREEN** *vs* land property, water use



CONCLUSIONS

- Lack of “social” dimension
- Indicators confirm initial hypotheses and academic assumptions
- Challenge *vs* water management project and gender inequalities
- Core of indicators to be used in according to different purposes



REFERENCES

- FAO, Passport to Mainstreaming Gender in Water Programmes. Key questions for interventions in the agricultural sector, FAO, 2012, Rome.
- Tayyib, Salar, Valeria Rocca, and Zsofia Bossanyi. "Core gender indicators for assessing the socio-economic status of the agricultural and rural population“, 2013.
- Van Koppen, Barbara, Lesley Hope, and Willem Colenbrander, "Gender aspects of small-scale private irrigation in Africa“, *International Water Management Institute (IWMI)*, Colombo, Sri Lanka, 2012.
- Koppen, B. van, R. Namara, and C. Safilios-Rothschild. "Reducing poverty through investments in agricultural water management." *IWMI Working Paper 101*, 2006.
- Van Koppen, Barbara, "Towards a Gender and Water Index“, 2002.
- Van Koppen, Barbara, and Barbara CP Koppen, *A gender performance indicator for irrigation: Concepts, tools and applications*. Vol. 59. IWMI, 2002.



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