

GRoW-Mid-term Conference
Global analyses and local solutions for sustainable water resources management
20 - 21 February 2019, Frankfurt am Main, Germany

**Challenges and opportunities for transferring research results
into practice**

“GROW transfer-region Latin-America”

**Inputs by Mauricio B. Scheer – Water and Sanitation Company of
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SANEPAR

Services:

- water treatment and distribution;
- sewage collection and treatment;
- selective solid waste collection and disposal.

Mission:

- provide them in a sustainable way.



A workforce composed by more than 7 thousand employees ...













SANEPAR in numbers

Aprox. 10 million inhabitants

...

Water		Sewage	
	3.8 million Active economies	2.8 million Active economies	
	100% Network supply index	71% System coverage index	100 % Treatment index

Water treatment plants WTPs	Sewage treatment plants STPs	Wells	Landfill sites	Dams
				
166	243	1.058	3	4
				

Inputs

How can research results successfully be translated into practical application and integrated into daily management practices?

- 1) For useful results, besides the initial knowledge of the researchers, is needed to identify **right people and departments** and construct a environment of **trust**;
- 2) This team, through a **communication plan**, must **identify key demands** that can be attended by the project;
- 3) **Plan** strategies and approaches **including** all actors;
- 4) Constant **maintenance** of confidence;
- 5) **Convincing** informing about the potentials and the boost in research, with gains of time, investments and resources...;
- 6) Understanding the needs, some first products can be **carefully customized** and introduced (most powerful information with support changing culture, maps, web sensor platforms...).



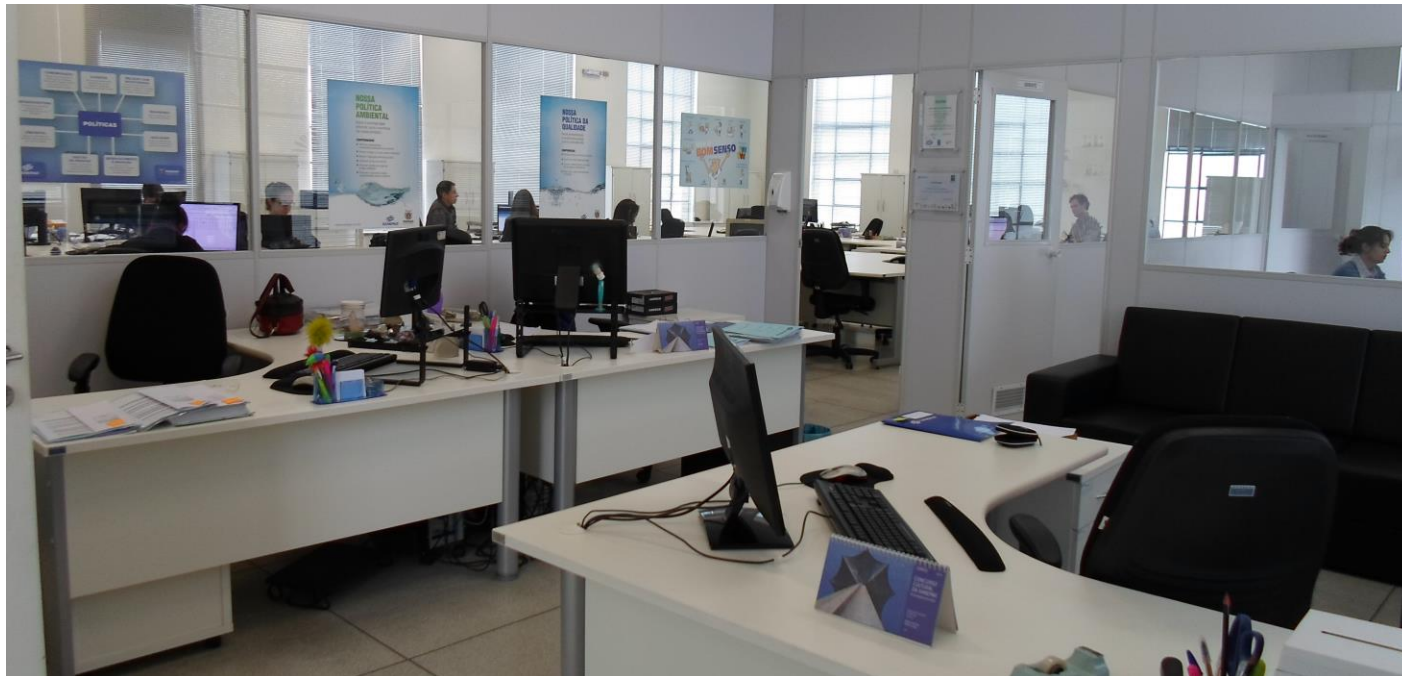
The communication plan or activities must run preferably since the conception of the project (demands, aim discussions), passing through the course of the investigations (intermediate workshops, meetings, sharing emails and messages and open field campaigns, publishing news) until the scientific and non scientific publications of the results as well as further trainings and tools transferring

...

Inputs

What are pitfalls and opportunities to overcome them?

- 1) **Size of the agencies** can lead to time and resource losses with **wrong people or department**: *search for more contacts, open discussions, communication, good network...
- 2) **Overwork routines** and responsibilities of managers and operators, and;
- 3) **Resistance** (sometimes some discredits with research approaches): *boost inclusion, communications, results, publications; ...customize maps, manuals, tools ...convincing, and gaining trust. ...



Inputs (Challenges and opportunities for transferring research results into practice)

Which Social and technical framework conditions need to be taken into account?

1) Levels of **previous experiences and trust**:

A working environment must be constructed aiming on **Trust** between research agents of both parties (from research institutions and research representatives of companies);

2) **Formalization**: MOU and/or Terms of Technical Cooperation;

3) **Communication Plan**: detailed idea of internal and external communication of project course and results:

- Relevant **results and tools** must be discussed among partners;
- It is recommended to be **refined** and presented in a **applicable way**.

...



Catamaran equipped for research: partnership (Operating since Feb 2018)

Inputs

...And such framework in the Latin American context?

MuDak project experience (research into practice)

1) Previous experiences and trust:

SANEPAR has some history in research and partnerships. We have a R&D Department. This is an important step to the success of the project.

Most of the other Brazilian companies and partners don't have the same facilities;



Research Representatives
Research, Development & Innovation Department
CETS - Sustainable Technology Centre of SANEPAR

Inputs

...And such framework in the Latin American context?
MuDak project experience (research into practice)

2) **Formalization:** UFPR (University),
KIT, TNC (NGO) ...other partners?



Inputs

...And such framework in the Latin American context?
MuDak project experience (research into practice)

3) Communication Plan: shared emails, meetings, workshops, trainings, publications, interviews, news, contacts, inclusions, open field big campaigns and monitoring, sensor web platforms...



Some INTERDISCIPLINARY PUBLICATIONS WITH SOME APPLICATIONS...< P loads...



Inputs

...And such framework in the Latin American context?
MuDak project experience (research into practice)

3) ...Communication Plan: emails, meetings, workshops, trainings, publications, interviews, news, contacts, inclusions, open field big campaigns and monitoring, sensor web platforms...discussions and strategies to **boost all approaches.**

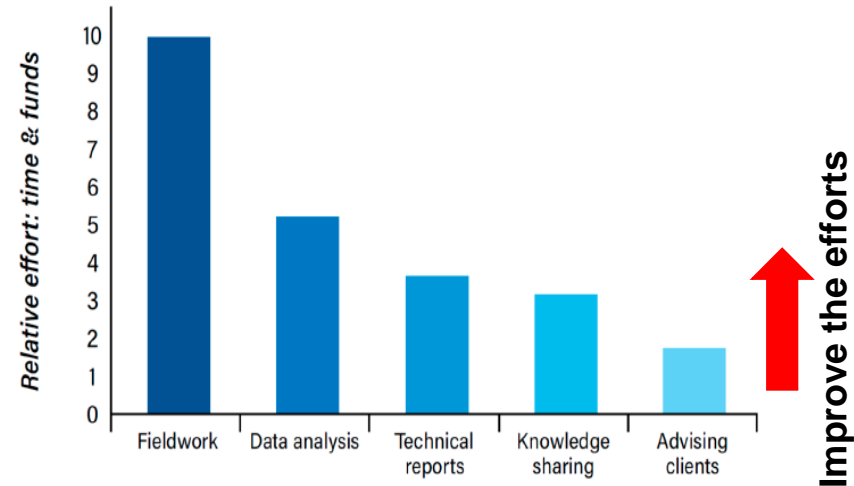


Figure 7. Relative time allocation and funds for different stages along the research to utilization chain.

Source: [36].

Hatibu (2006) cited by Ortigara, A. R. C., Kay, M., & Uhlenbrook, S. (2018).



Workshop MuDak, Brazil (2019)

**THAT IS VERY
COMPLEX AND NOT
AN EASY TASK!**

THANK YOU!



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