GEFÖRDERT VOM
Bundesministerium für Bildung und Forschung

Second GRoW workshop on the cross-cutting topic "Incentive mechanisms in the context of governance"

Minutes

Date:	**22 October 2018**
Venue:	**Hoffmanns Höfe, Frankfurt am Main**
Participants:	**11 (from the GRoW projects go-CAM, InoCottonGRoW, iWaGSS, Trust, ViWA, WANDEL, GlobeDrought); see the participants list in Appendix A5**
Responsible Person:	**Professor K-U. Rudolph, supported by B. Gerhager; A. Grieb**
Moderation:	**Theresa Lorenz, Dr Sabine Blumstein**

Welcome by Dr Sabine Blumstein & Professor Karl-Ulrich Rudolph

- Welcome and presentation of the agenda
- Introduction of participants

Keynote presentations

Gap between macro and micro level governance – example of South Africa (Professor Karl-Ulrich Rudolph)

- At its first meeting for the cross-cutting topic, the working group decided to work on the link between the macro and micro level of water governance, which implies scaling down the focus to, e.g., the level of water utilities in order to achieve SDG 6. To become more specific on the micro level, different performance indicators could be used.
- Presentation of ten dimensions for assessing water utilities, of the logical chain between the macro and the micro level (top-down and bottom-up) and of the Output Deliverable Incentives (ODI), which the projects should examine more closely.
- The projects should be dealing with bridging the macro and the micro level, and with incentives being implemented at the micro level.
- As yet, there is no methodology to link the macro and the micro level in the water sector. However, there are linking elements, which have to be identified by the projects themselves.
- Ms Gerhager and Mr Grieb approved of the working group's consideration of the micro level and pointed out that changes at the macro level need time before showing impacts on the micro level.

Bridging the governance gap between the macro and micro level by economic incentives in South Africa (Jens Hilbig)

- The achievement of SDG targets 6.1 and 6.2 is impeded by a huge gap in financing.
- In South Africa this financial gap in the water sector is estimated to be about USD 5 billion per year. iWaGSS aims to address the gap by helping to solve water governance problems.
- Despite good legislation on the macro level, implementation and enforcement at the river basins level is often insufficient. For example, catchment agencies have not been established yet.

- As a result, voluntary informal institutions (e.g. user forums) are used. This is because of the malfunctioning formal institutions (malfunctioning at the political, administrative or financial level).
- Considering these conditions, iWaGSS examines how water governance could be improved. This includes mechanisms which consider informal institutions, as well as accompanying (financial) incentives and economic aspects.

Follow-up discussion

- In cases of malfunctioning states, financing water infrastructure via non-governmental funding could be considered. However, purely informal solutions that exclude the state should be considered with caution. Instead, the formal and the informal sectors should be brought together.
- An extensive implementation of the proposed mechanisms is possible via ring-fencing (means of achieving cost transparency) if service providers transfer water provision to third parties. However, this is not taking place in South Africa.
- The iWaGSS project only addresses this issue of cost transparency. Cost recovery should, however, be considered at a later stage.

Institutional framework of water use (Jonathan Schulze)

- Presentation of the InoCottonGROW article “Importance of institutions to address water scarcity in large-scale irrigation systems”, which considers the example of Pakistan.
- The article focuses on social dilemmas, which occur when individuals put their self-interest above a community’s interests. These social dilemmas and their solutions are taken into account in order to analyse good governance. Therefore, formal and informal institutions have to be analysed if social dilemmas within water management in irrigation systems are to be solved.
- Presentation of the analysed institutional gaps in water allocation in the irrigation system of the Indus Basin in Pakistan (head-tail problem).
- The methodology for the analysis is based on Ostrom’s Design Principles for successful water management. Institutional gaps were found in enforcement, monitoring and sanctioning. Institutions could be improved by decentralising the system and changing it from a top-down to a bottom-up system. In a next step, sanctions and incentives for Pakistani farmers will be analysed in detail.

Follow-up discussion

- It was suggested to replace the term “informal rules” with “societal patterns”, as societal patterns indicate the importance of the local context. However, workshop participants tended to prefer the term “informal rules”.
- The importance of local structures and caution in proposing and implementing “western” or “international” structures was pointed out. All the projects should carefully consider when to work with local structures and when to introduce new, external structures.

Water governance, indicators and measurements (Dr Alisher Mirzabaev)

- Every GRoW project addresses governance in some way. However, they do not always have the same understanding of the term.
- OECD defines governance as “the range of political, institutional and administrative rules, practices and processes (formal and informal) through which decisions are taken and implemented, stakeholders can articulate their interests and have their concerns considered, and decision-makers are held accountable for water management”.
- This definition distinguishes water governance from water resource management, which focuses on operational activities.

- Measuring water governance structures is important for tracking progress and designing effective policy interventions. This can be done by analysing different components: institutions and actors, governance principles, and performance. These components can then be operationalized as different (measurable) water governance indicators.
- During the discussion it was emphasized that it is important to link the measurement of water governance with regulation, performance and sanctioning.

Short introduction to the working groups

- The topic owners briefly introduced the scope and objective of their respective working group.
- Irrigated Agriculture (Ms Zimmermann): During the first online meeting, the group decided to work on the following topics: legal framework, potentials of social innovations, and potentials of digitalisation. These will be elaborated in the framework of governance and incentive mechanisms.
- Measuring Governance (Mr Mirzabaev): The working group aims to establish exchange between projects which deal with measuring governance and governance indicators. The group wants the projects to learn from each other about how to measure governance.
- Turning Governance Research into Practice (Mr Grieb): The group will focus in its work on the micro level.

Working group plenary session on irrigated agriculture (moderated by Nora Zimmermann)

Considering the small group of participants, it was decided to first discuss all three topics together in one group (rather than splitting up into three different working groups) and focus the discussion on the example of irrigated agriculture.

Presentation of the projects' work on legal frameworks within irrigated agriculture

- **GlobeDrought** works only indirectly on the legal framework in South Africa. It analyses whether the legal framework is favourable for implementing the project tools, and provides the information to its local partners.
- **ViWa** deals with sustainability assessments of water consumption in irrigation. In this context, the legal framework will be examined on the macro and micro level by analysing water-related SDGs and other norms on the international level, and by analysing implementation gaps in local water management.
- In its Brazilian case study, **WANDEL** examines the impacts of the legal framework in sugar cane production for the transition to renewable energy from a hydropower perspective.
- **iWaGSS** examines the implementation problems of the relatively well-developed legal framework for water management in South Africa.
- **InoCottonGROW** analyses why the formal rules provided by the Pakistani legal framework (reform within the irrigation sector) are not being implemented.
- **Trust** is not working on irrigation, but the project nevertheless analyses the institutional framework in Peru to support implementation of the technical project outcomes. To investigate the formal, informal, traditional and modern system, Trust is conducting a conflict analysis that focuses on conflicts between water managers.
- **go-CAM** is not working on irrigation agriculture. However, impacts of climate change make irrigation agriculture an increasingly relevant topic in Germany.
- In the brief follow-up discussion, it became clear that analysing legal mechanisms and frameworks in order to assess the potential value of the projects' technical outputs is of high relevance.

Potential for social Innovations

- Ms Zimmermann introduced definitions of social innovations. This was followed by a brief group discussion about social innovations and social goals (see Appendix A.2).

- Although many projects were interested in the topic during the working group's last online meeting, the projects barely work on and/or are barely familiar with social innovations.
- Since the project representatives agreed that knowledge-sharing was the overall aim of this meeting, the group decided to split into two working groups to create more space for a discussion about the two governance topics.

Parallel work in the working groups

Working Group 1: Irrigated Agriculture (continuation)

- The group continued its discussion on social innovations. It was agreed that social innovations often require a "business case" to ensure sustainable application/use of such an innovation.
- The discussion moved on to the incorporation of ICT tools in agricultural irrigation, such as including stakeholders (famers) in data collection activities (farmers also often have special knowledge that should be considered). Incentives for participation are, however, often low and they also raise questions about data preparation/processing (considering the level of education).
- However, more transparency in terms of water accessibility would help farmers to know why there is too much or too little water.

Digitalization

- Participants exchanged their experience of digitalization within the projects.
- InoCottonGRoW: Pakistan is currently digitalizing land records (database) which is directly linked to irrigation (flat fee for irrigation, no matter what crop you plant). Effectively, though, not every farmer pays the same per acre. It is expected that digital land records will make it much easier to monitor what each farmer has to pay.
- WANDEL: Precise irrigation and crop irrigation (in Brazil), using drones (sugar cane mill company) with which one can monitor plant plaques, where one can harvest, where irrigation is needed, etc. There are also attempts to monitor aspects of water quantity and quality.

Way forward/interests:

- ViWa: The legal framework is most interesting; how to analyse it with regard to irrigation agriculture? (Maybe bilateral exchange on different concepts used in the different projects).
- WANDEL: The legal framework is also more interesting (lack of experience here).
- GlobeDrought: Great interest in exchange about indicators (which are developed for the web-based tool that characterises droughts) to ensure that end-users actually use the end product.
- InoCottonGRoW: Most interested in deficits in the implementation of the legal framework and in how to use digital and social innovation for overcoming these limitations.

Working Group 2: Measuring Governance & Turning Governance Research into Practice

Brief overview of envisaged discussion points

- Exchange between projects on methods of measuring governance and possibly collecting lessons learned about measurements from the case studies.
- Identify future directions of research and how research can support people working in practice, e.g. in the development cooperation sector.
- Analyse relevant mechanisms for successfully implementing governance structures
- Analyse how to transfer results from pilot sites to practice.

Follow-up discussion

- Research can help to analyse shortcomings in implementation (a lack of financial incentives, for example) and suggest possible improvements and solutions, especially technical solutions.
- Possible incentives: financial incentives, benchmarks, votes.
- Small exchange about whether the projects are measuring governance: In iWaGSS, performance is measured in the case studies and there are some other elements of measuring governance. However, it is not a focus within the project. InoCottonGROW measures governance indirectly, or rather a step ahead, by evaluating policies using Ostrom's Design Principles.
- Discussion about the suitability of the term "measuring governance": Although the term "measuring" is too specific (as it seems to require information on measurement as an outcome), the group decided not to change the working group name.
- Recommendations by Ms Gerhager and Mr Grieb: The working group should define its understanding of "governance" and be cautious about the term "good governance", as it is a relative term. Furthermore, the working group should stay on the micro level of the water sector, to avoid getting lost in analysing overall mechanisms and structures.
- Suggestion to use conflicts as indicators for governance: Stakeholders, their interactions, rules, etc. are analysed, which means governance can be analysed indirectly.
- Identification of potential principles of good governance: Separated functions and institutions / separation of powers (water regulation and its execution, for example), enforcement of these functions and institutions (through incentives or sanctions, for example), and monitoring, which can be linked to digitalisation as it depends on data handling.
- Joint deliberation of possible outcomes of the working group: Two focus points for the outcomes were suggested: clustering important aspects of good governance and harmonizing governance. A common understanding of good governance throughout the projects is not essential here. At a later stage, the governance information from the projects can be condensed and shared in a position paper. Further specific outcomes and their dissemination have to be determined in the future.

Summary of working group results in plenary, and discussion on next steps

Outcomes of Working Group 2, Measuring Governance & Turning Governance Research into Practice (Dr Mirzabaev & Professor Rudolph)

- Useful exchange about different terms, the projects' work on measuring governance, indicators, and ideas for the joint work.
- The group will collect and disseminate aspects of good governance from the projects, since general principles of governance do not always fit the water sector.
- The working group might produce a position paper, and further outcomes will be discussed at a later stage.

Outcomes of Working Group 1, Irrigated Agriculture (Ms Zimmermann)

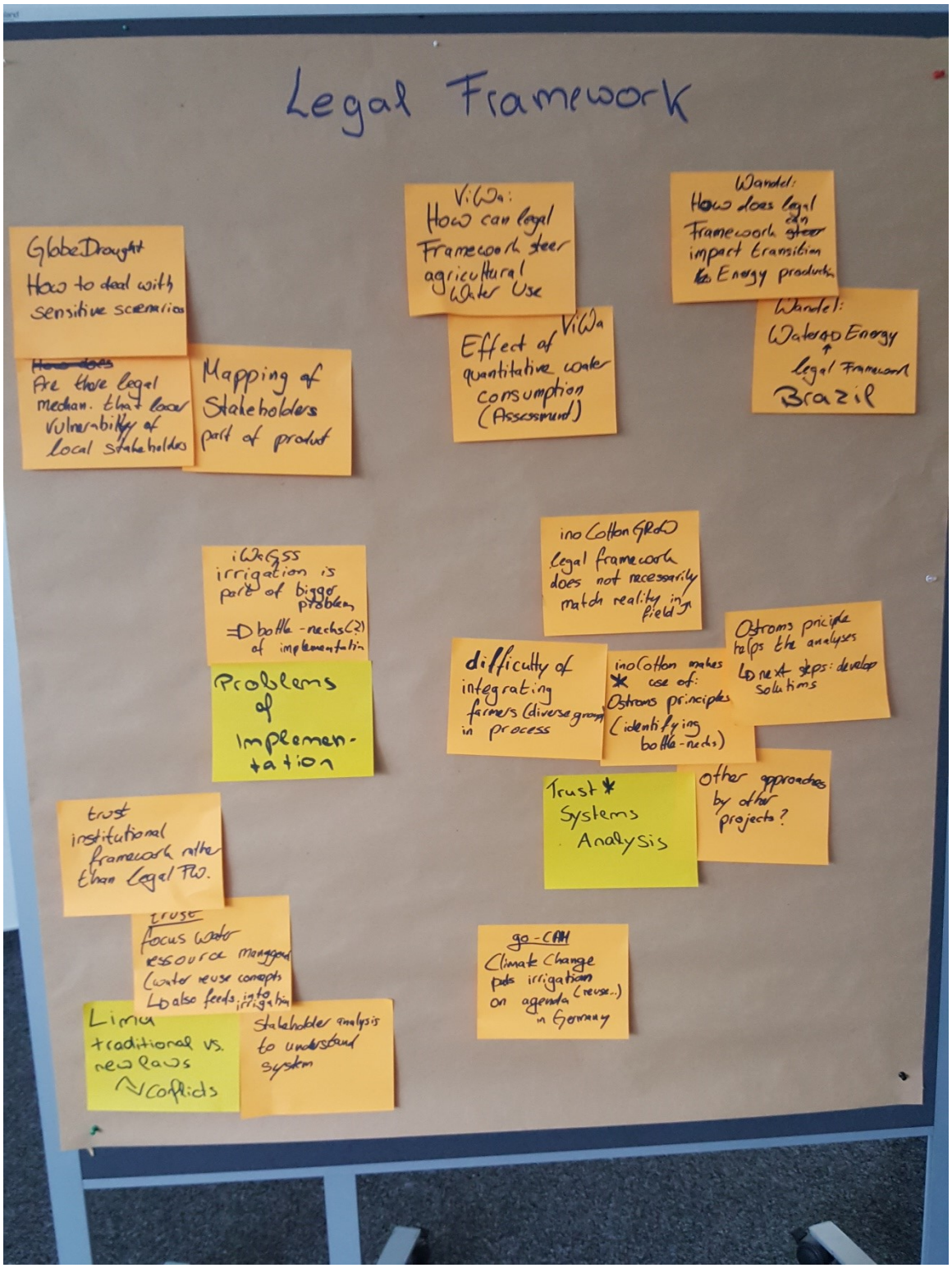
- The working group shared specific project information on, among other things, methods and case studies.
- The group would like to meet at a small session during the mid-term GRoW conference to exchange more information on the use of legal frameworks within the projects.
- The gathered information on legal frameworks could be published in a joint publication.

Closing workshop summary (Professor Rudolph)

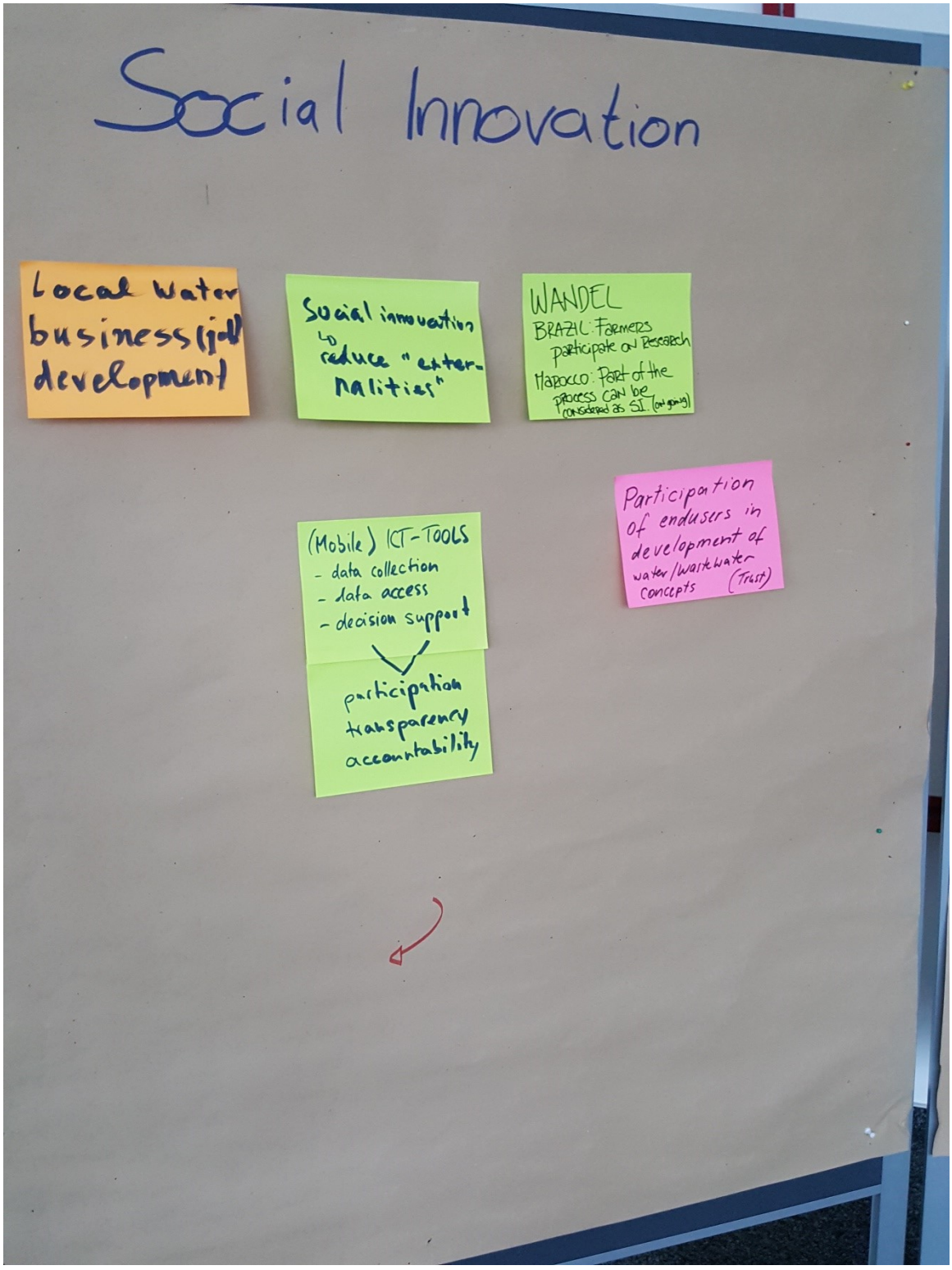
- Within the cross-cutting topic, the work on social innovations should be continued. A potential focus and social goal could be job creation, or rather local water business development.
- It was agreed, that it would be interesting to invite an external speaker to give input on the topic of water governance. Ms Gerhager and Mr Grieb suggested to invite a lawyer working in the field of international water law to the next working group sessions.

Appendix

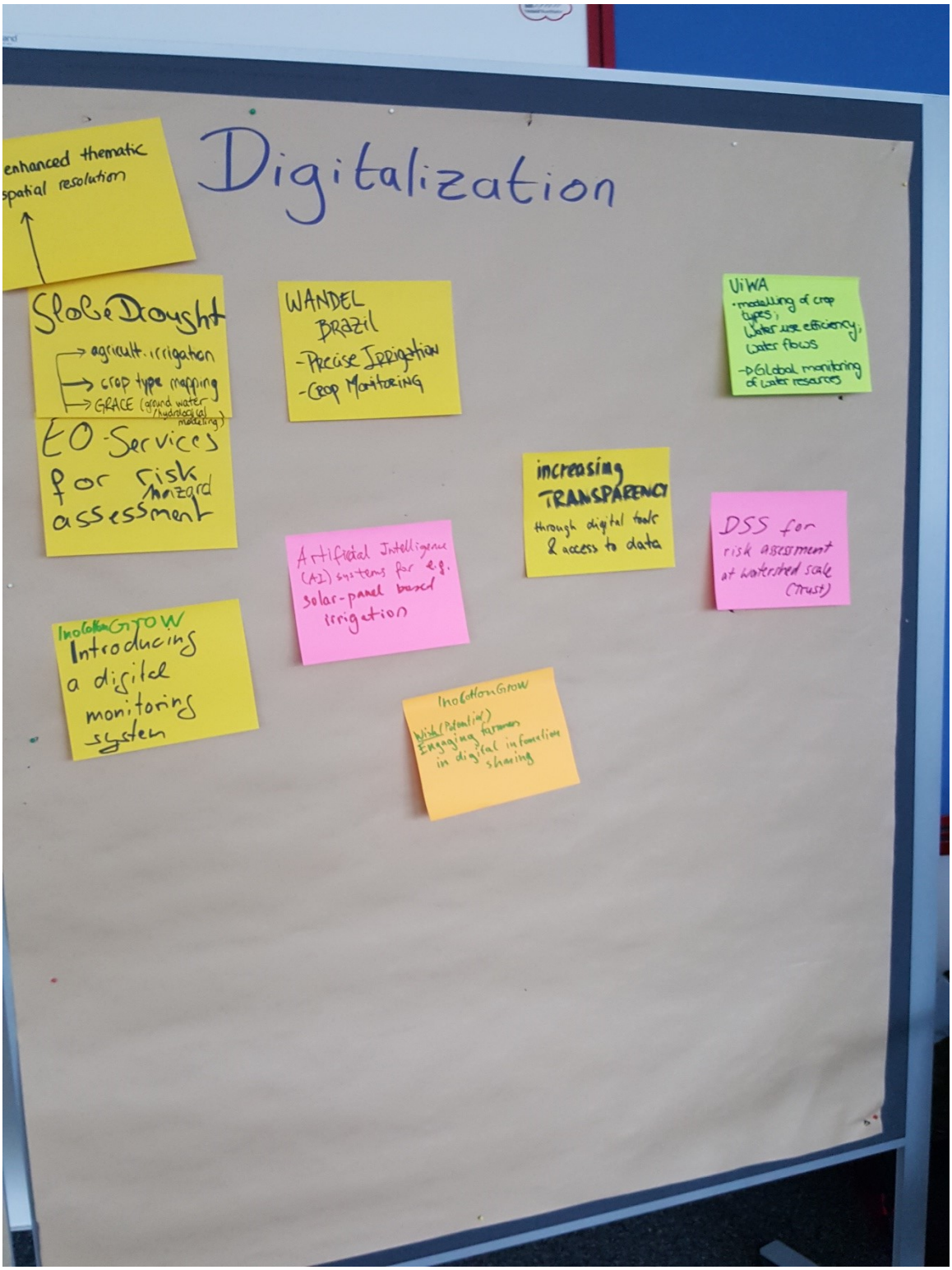
A.1 Collection of the projects' work on legal frameworks within irrigated agriculture



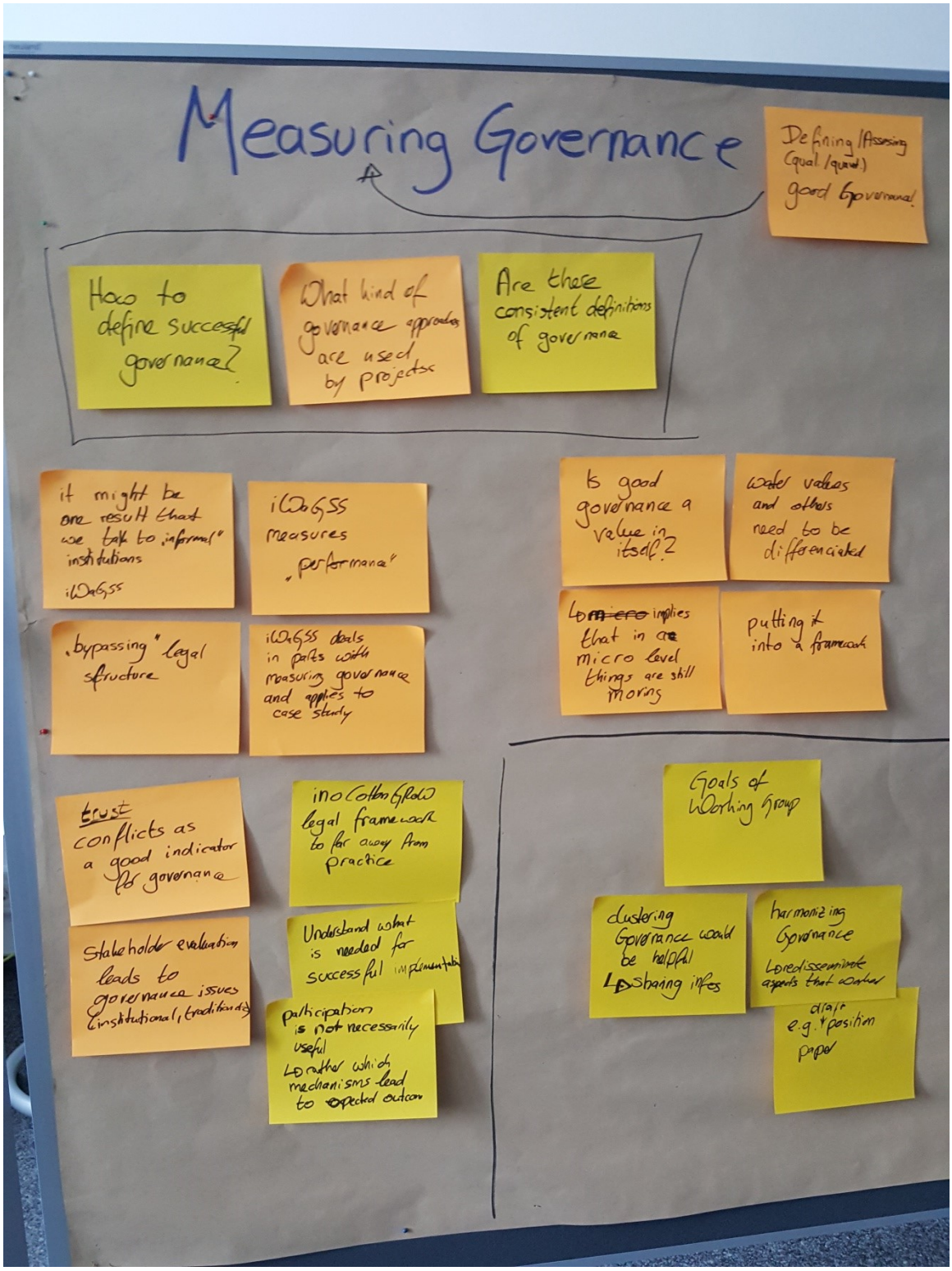
A.2 Collection of the projects' work on social innovations

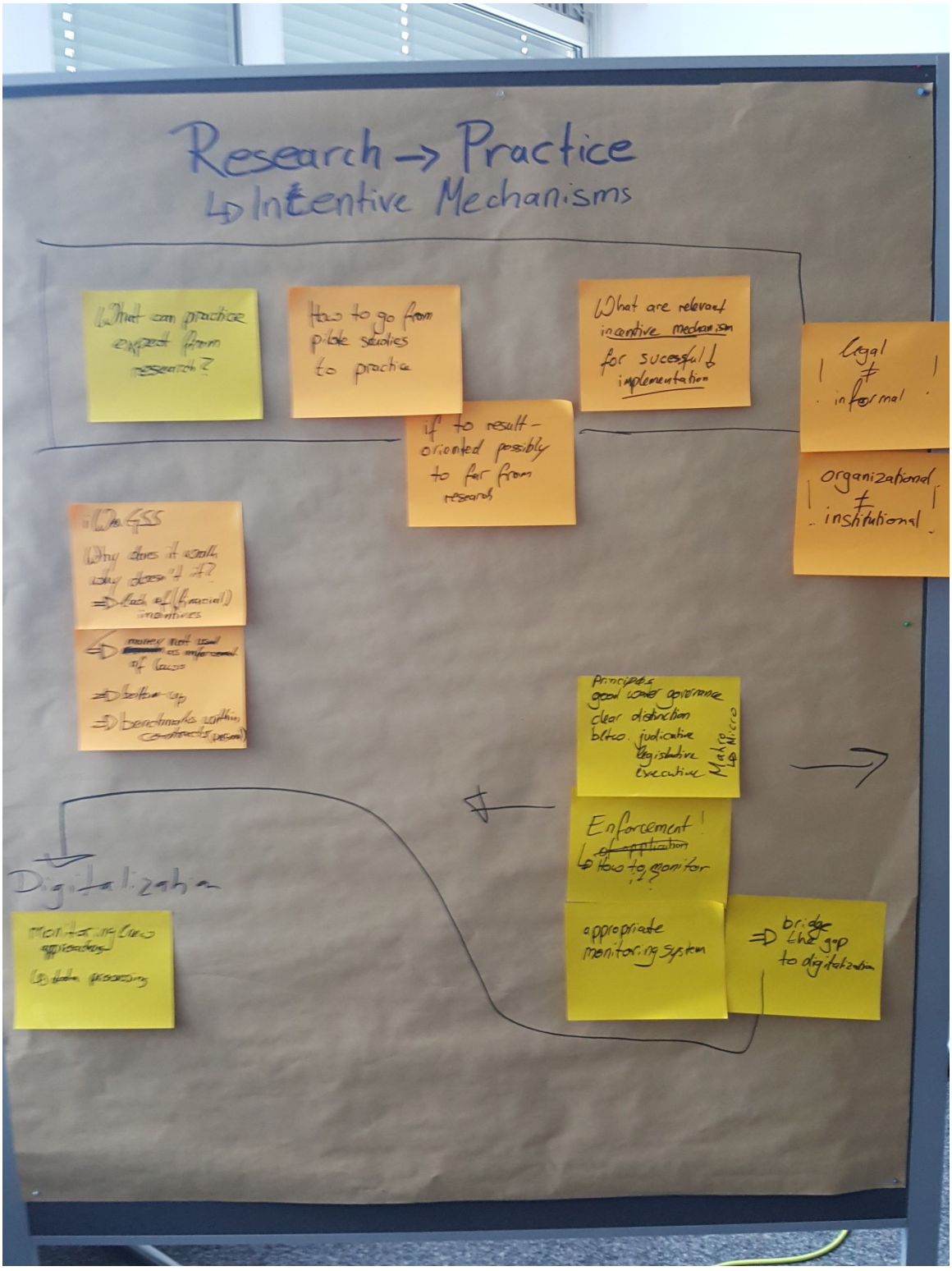


A.3 Collection of the projects' work on digitalization and results from the Irrigated Agriculture working group



A.4 Results from the Measuring Governance & Turning Governance Research into Practice working group




Research → Practice
↳ Incentive Mechanisms
What can practice expect from research?
How to go from pilot studies to practice
What are relevant incentive mechanism for sucessful implementation
legal ≠ informal
organizational ≠ institutional
if to result-oriented possibly to far from research
Why does it work, why doesn't it?
Principles good water governance
clear distinction betw. judicative
legislative
executive
Enforcement!
↳ How to monitor
appropriate monitoring system
bridge the gap to digitalization

A.5 List of participants

No		Last name	First name	Institution	Project	E-mail	Working group
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