ANNEX

Strengthening Knowledge Ecosystems

15 November 2021

South Sudan Case Study

Ursina Bentele, Malish John Peter, Dr Owen Ndoromo

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An aerial view of Juba, South Sudan

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Executive Summary

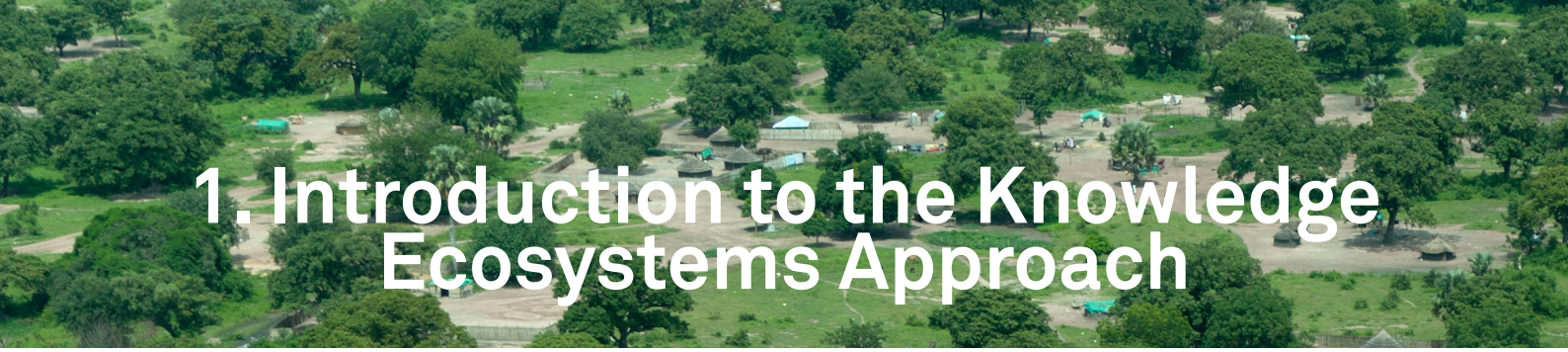
In order for the South Sudan knowledge ecosystem to turn into a more enabling environment, structural and financial inputs are needed: Predictable and long-term funding hubs or start-up grants could be created, which target academic research. Further recommendations to strengthen the knowledge ecosystem in South Sudan circle around financing PhD programs, skills training and – importantly – invest in research infrastructure such as libraries and digital platforms. The latter would be beneficial to both academic research as well as more practice- and policy-oriented research. On the other hand, also the demand side needs attention and investment. This could involve investing in research partnerships that ask for active engagement of local researchers and hence increase their visibility in the research community. Further, the quality and outreach of research products would benefit from installing feedback loops among partners partners, quality assurance processes and securing the respective budget.

Further, the South Sudan knowledge ecosystem would benefit from a more active science-policy exchange. This needs involvement from all sides (and the identification of relevant capabilities for policy uptake, as well as interests and opportunities to do so). Research donors could take a more active role in facilitating such a dialogue with stakeholders and decision-makers on how they can best benefit from research (both mandated, practice-oriented work and academic research).

The years leading to independence and after independence of South Sudan in 2011 were marked by a trend towards strengthening research in and on South Sudan. An increasing flow of international funding supported external researchers, but also South Sudanese researchers and the founding of research institutes. With the outbreak of the civil wars in 2013 and 2016, however, international funding was redirected towards humanitarian action. Researchers also tended towards topics related to humanitarian aid, providing analysis and data to inform programming. Such mandated research continued to be funded externally and focused on donor-driven research agendas. The main demanders of this research were and still are civil society organisations, NGOs, UN agencies, the diplomatic community and multinational bodies. Academic research, on the other hand, remained more independent, but also significantly less funded.

The higher education sector in South Sudan offers only limited options and quality, with little focus on research skills. Thus, many South Sudanese researchers study abroad, particularly for their MA and PhDs. Lacking incentives to return and continuous security threats for researchers lead to brain drain. The poor funding situation and the limited academic freedom are further reasons for well-educated professionals to drop out of an academic career and seek employment with international actors.

This case study provides an overview of research actors, knowledge producers and consumers in South Sudan. It provides entry points for research funders to strengthen the research sector in South Sudan and the exchange between science and policy for sustainable development.



1. Introduction to the Knowledge Ecosystems Approach

The research project 'strengthening knowledge ecosystems' is part of IDRC's endeavour to strengthen the contribution of research support in 'high-risk' contexts. The jointly designed research foresaw case studies to better understand research in conflict-affected contexts and to inform effective pathways and modalities for supporting research in such settings. The project comprises in-depth case studies on Afghanistan, Laos and South Sudan, which were conducted jointly with locally-based research consultants. Additionally, five shorter-term case studies were conducted in Cambodia, Côte d'Ivoire, El Salvador, Ethiopia and Lebanon, building mainly on desk research as well as key informant interviews.

This study looks at 'knowledge ecosystems' as a whole, covering the full process of knowledge production from agenda setting, getting funding, and selecting partners to conducting research (i.e. choice of methodology and research design, data collection and analysis, publication), to doing outreach and policy uptake (see the Synthesis Report for more information on the conceptual background of this study).

With this research, we aim to understand best practices of knowledge production and policy uptake of research in high-risks contexts. In order to understand knowledge ecosystems, a political economy approach was adopted, by following four 'threads' within these systems:

1. Follow the **persons** to understand the biography and professional life of researchers and academics;
2. Follow the **money** to understand the sources, salaries and flow of funds into research activities;
3. Follow the **organisations** (research and higher education institutions, think tanks, NGOs, etc.) to understand the operational logic and degree of influence with regard to research and policy;
4. Follow the **ideas** to understand the pathways and relevance of scientific content towards outreach and policy in the respective context.

This allowed us to assess the research environments and its actors from various angles, all departing from the respective case study contexts. To this end, a semi-structured questionnaire was developed, covering these four tracks (persons, money, organisations, ideas).

The overall research design for the entire "Strengthening Knowledge Ecosystems" project centered on capturing local perspectives and insights from researchers of the 'Global South'. In this vein, data collection and recommendation generation for this Annex focused almost exclusively on the South Sudan context seen through 'South Sudanese eyes'. For the same reason, this report only includes additional sources or references to a limited extent.

Based on this understanding actionable recommendations to strengthen knowledge ecosystems in different types of high-risk contexts are suggested. Thereby, this research aims to contribute to improved and relevant research, academic careers and policy uptake. Thus, we aim to promote resilient, locally-driven research ecosystems, support the research community to conduct conflict sensitive research, and lastly, to improve the opportunities and the security of research partners in the Global South. Overall, this shall valorize research for development outcomes as well as towards democratic governance.

Visualising Characteristics of Knowledge Ecosystems

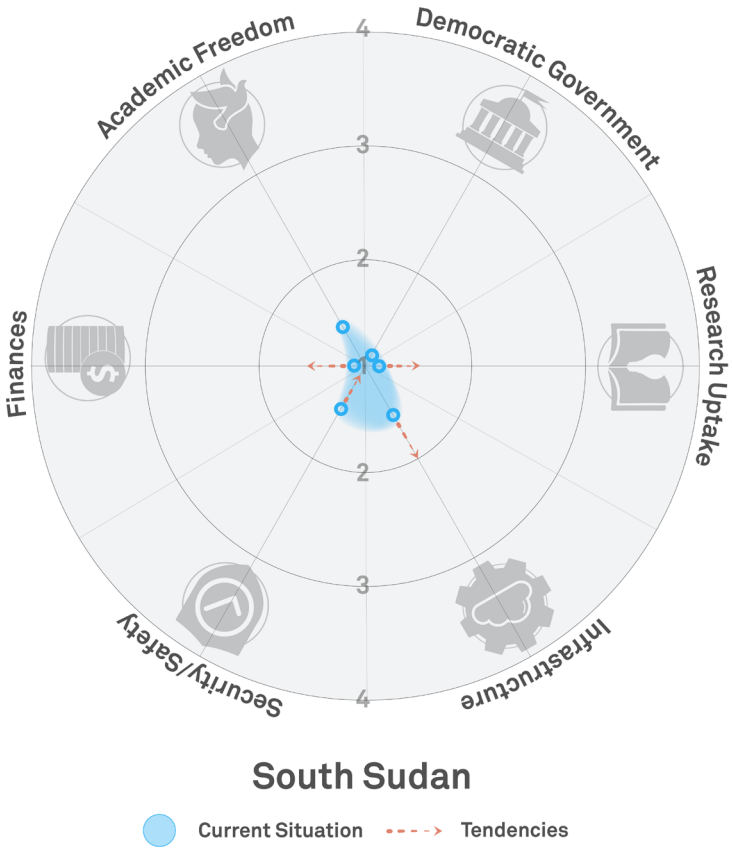
The knowledge ecosystems assessed in these case studies are all characterised by a low to medium demand of research that is in many cases externally driven. They are characterised by an environment that is not (much) enabling for researchers. In order to visualise these characteristics, we illustrate the strengths and weaknesses of six dimensions of knowledge ecosystems. This helps our understanding of a context and informs our conclusions as to what kind of strengthening measures could be taken by stakeholders and donors to facilitate knowledge production and research, information uptake and evidence-based decision-making in conflict-affected or authoritarian contexts.

The dimensions were developed thinking from a context/researcher's perspective. The case study contexts are situated along these dimensions based on a qualitative assessment (scale: high/strong – low/weak) to give a rough indication of the system's characteristics:

A simple scaling of these dimensions of knowledge ecosystems from 1 (low) to 4 (strong) covers the following ranges, informed by a list of indicators (see Synthesis Report for further information) as well as a context-informed decision by the respective case study researcher(s).

	DIMENSIONS					
	Infrastructure that is inducive for research (internet, database, ...)	Safety for researchers is guaranteed vs researchers are particularly prone to risks.	Finances available for research and conducive funding modalities, reliable income for researchers	Good governance of research, academic freedom is guaranteed, independence of research	Type of government: democratic government or weak/ authoritarian government	Reliable policy relevance & research uptake (e.g. validation of knowledge, role of local researchers)
SCALING 1	no research infrastructure available	high-risk context for researchers, very difficult to guarantee any safety for researchers	zero research funds available	zero academic freedom	authoritarian or dysfunctional/ weak government	zero research uptake
SCALING 4	fully-fledged research infrastructure for researchers	safe environment for researchers, even if they work on sensitive topics	fully-funded research programme, long-term financing available for researchers	fully guaranteed independence of research	democratic government	fully-implemented science-policy dialogues, research uptake works for majority of issues

Characteristics of the South Sudanese Knowledge Ecosystem



The years leading to independence and after independence of South Sudan in 2011 were marked by a trend towards strengthening research in and on South Sudan. An increasing flow of international funding supported external researchers, but also South Sudanese researchers and the founding of research institutes. With the outbreak of the civil wars in 2013 and 2016, however, international funding was redirected towards humanitarian action. Researchers also tended towards topics related to humanitarian aid, providing analysis and data to inform programming. Such mandated research continued to be funded externally and focused on donor-driven research agendas. The main demanders of research being civil society organisations, NGOs, UN agencies, the diplomatic community and multinational bodies. Academic research, on the other hand remained more independent, but also significantly less funded.

The higher education sector in South Sudan offers only limited options and quality, with little focus on research skills. Thus, many South Sudanese researchers study abroad, particularly for their MA and PhDs. Lacking incentives to return and continuous security threats for researchers lead to brain drain. The poor funding situation and the limited academic freedom are further reasons for dropping out of an academic career and seeking employment with international actors.

2. South Sudan Case Study

A note on the data collection

Gathering information about education and research in a large country and 'young' state like South Sudan where statistical data is largely lacking, where up-to-date information on research institutions and education policies is difficult to find, and where access to different states is limited due to the absence of roads, flooding or violent conflict, is challenging.

For this qualitative study, over 30 interviews were conducted between September 2020 and June 2021 by two research consultants based in Juba and one in Switzerland. The interviewees' age ranges from young students to established academics, a third of the interviewees are female, most were based in Juba, a third is based abroad (both free-lance and university/state employed), some following more of an academic career, others working in civil society organisation and teachers. Government officials were more difficult to reach. We had access, however, to a few employees at the Ministry of Education and one from the Ministry of Defence. The majority of interviewees were South Sudanese, a few international professionals from the development and aid sector based in South Sudan. The interviews were conducted at a time of the Covid-19 pandemic. They were conducted both virtually and in in-person meetings. The changing regulations to prevent the Covid-pandemic made scheduling interviews, travelling and hosting meetings problematic. Weak connectivity and limited internet access made it difficult to transfer F2F interviews to virtual meetings. Several interviews were cancelled due to these challenges. Some of the prospective respondents cited tight schedules and time constraints to participate in the interviews.

The preliminary findings of the case study were presented at a validation workshop in June 2021. The workshop took place in a big hotel hall in Juba, respecting the Covid regulations in place, with a dozen of the interviewees present in Juba participating. Further validation took place in fall 2021 when the first draft of the case study was written and particularly the interviewees living abroad commented on the report in writing.

On a general note, the interviewees were very much interested in topics around research funding, regulation and use of research products in South Sudan. They were also keen in assessing the role of the South Sudanese government in promoting the research sector in the country. Overall research governance, civic space and technical aspects of developing the research sector were also mentioned by research participants, even if they were not explicitly asked for in the questionnaire. Had the circumstances allowed physical meetings, many interviewees would have been interested to participate in focus group discussions to generate a more in-depth understanding of the research sector. All interviewees are interested to receive a copy of the final report.

Researchers' voices / Reflection on interviews and on the project itself:

"I have a question and suggestion: please take the time to speak to as many academics and researchers as you can, because they are in little spaces where they cannot really share, except in those little spaces where you trust friendships, but an opportunity like this, they have so much to say. They will help shape the recommendations." (SSD22)

"First of all, thank you for contacting me to have to have this discussion. As a researcher I'm always interested to have this discussion around research, it not only benefits you, working on peace, but also me, in terms of knowing what is happening where." (SSD26)

"Due to the security situation, it was really challenging and difficult finding partners for interview. For some may think the researcher is a security argent, collecting in research cannot be completed by one person at a time, [...] so things to do with security affairs has to wait for the right time." (SSD07)

"This research project was too short with the pandemic that prevented group discussions and thus did not deliver results as it could have." (SSD07)

2.1. Context: Research, Knowledge Production and Education in South Sudan

South Sudan, before and after independence, has experienced different levels of violent conflict over decades. This has created a legacy of poverty, destruction, trauma and social division along ethnic and other social and political lines. The education system is stagnant, as is the low literacy rate.[1] 80% of the population lives in rural areas. Two thirds of the population are in need of humanitarian assistance.

South Sudan has a centralized, patronage political system that boils down to the struggle over the presidency and that leaves armed forces as the only means to be part of the power (International Crisis Group, 2021). Long and frustrating negotiations of peace agreements and their limited and flawed implementation has contributed to the lack of trust in current politics to deliver the peace that was promised.[2] Key characteristics of inter-ethnic conflicts and marginalization in South Sudan can be summarized along three lines/levels:[3]

1. **Elite political-military competition over the state**: different political movements, often divided along ethnic lines, still influence and militarize the political system. Among others, they fight over control of oil fields, a main source of income. Given the fragmentation and that leaders frequently shift their alliances, international peace-making efforts have focused on an elite-level solution of sharing state control mostly.

2. **Citizen-state conflict**: South Sudanese citizens experience the central state as far removed, their main interface with 'the state' are the local and traditional authorities, particularly the

1 In 2016, the literacy rate among the population aged 15 years and older was for male at 40%, for female 30%, according to uis.unesco.org

2 See for instance: Nyaba, Peter Adwok. (2020) "Repeated Dateline Extension Exposes R-ARCSS Flaws and Parties' Lack of Political Good Will," and Jok, Jok Madut (2020) "South Sudan and the Peace Agreements No One Swears By,"

3 Source of information for this context chapter is the Conflict Sensitivity Resource Facility South Sudan, in particular "Back on their feet: The role of PoCs in South Sudan and the potential for returning 'home'" 12 October 2020, available here.

chiefs.[4] Local governments are under-resourced and can only provide limited basic services. Access to such services is often linked to having a community member in a position of power.

3. **Community conflicts over resources**: Local-level conflicts[5] over resources like water, cattle, grazing, land use and ownership and child abduction[6], affect many communities in South Sudan. Chiefs have historically been responsible for adjudicating disputes, both within and between communities.[7] However, these traditional forms of justice have struggled to keep pace with the increase of violence, due to the prevalence of small arms, and intergenerational and gender-related contests regarding reintegration needs after displacement or more generally regarding aspirations. Lastly, localized violence is often politized and influenced by the state and national level political and military interests.[8]

Furthermore, the **climate crisis**, specifically weather extremes, put additional pressure on the current situation of food insecurity and poverty. Most recently, also the COVID-19 **pandemic** has compounded problems in South Sudan by decreasing remittances, interrupted economic activity and schooling, and by severely damaging the health situation.

The **South Sudan knowledge ecosystem** is marked by this trajectory of conflicts and crises. Decades of civil war have ravaged the country's weak education system. It is coined by a dominant narrative of an "Arabized" north and an "African" south fighting for independence from the North starting in the 1950s, a fight that, by all means, was also fought in the education sector: After independence from British colonial rule in 1956, the northern administrative model was adapted in both the north and south of Sudan, leading to an attempt to 'Islamisation' and 'Arabisation' of the South. As Arabic became the language of instruction, Southerners were excluded from public administration.[9] In the same effort the Khartoum government nationalised missionary schools (Tounsel 2021) and in 1964, expelled all foreign missionaries, accusing them to be "an obstacle to national integration" (Sharkey 2012, p. 274).

The armed conflicts that Southerners fought among themselves for decades have also left their marks on a struggling education system, with high rates of illiteracy leading to weak teachers' capacities levels.[10] Hostilities between communities poses a problem to recruit personnel for communities without sufficient qualified teachers (Leben & Tolani, 2021, p. 12). With South Sudan's independence and the violence since, internal displacements have further negatively impacted the education system. The armed conflict has resulted in concentration of displaced persons in certain locations where they receive relatively better education than their host communities, which further hinders national healing and cohesion between them and IDPs (Leben & Tolani, 2021, p. 14).

Looking at the education sector in South Sudan during the last 15 years, the government has not adequately invested in the education sector, spending an average of 7.5% of its national budget on education. This budget barely finances salaries and basic running costs. While children in South Sudan are to a majority enrolled for primary education (in 2015, 85% of the male and 60% of the female children in their age group), only 14% of male and 7.5% of female youth attend secondary education. And on the level of tertiary education, numbers drop even more and the gender gap opens even more, with 1.2% of male and

4 However, chiefs' influence has been reduced by armed actors associated to the government and to armed opposition groups during times of civil war.

5 McCrone, Flora. "The War(s) in South Sudan: Local Dimensions of Conflict, Governance, and the Political Marketplace," 2021. http://eprints.lse.ac.uk/108888/1/McCrone_the_wars_in_South_Sudan_published.pdf.

6 Abduction of children and women is a "horrific aspect of conflict" among ethnic communities: UNMISS, 2 Apr 2021. https://reliefweb.int/report/south-sudan/58-abducted-women-and-children-are-reunited-their-families

7 For a prime example of costumary authorities taking the lead in a successful peace meeting, see the RVI report by Ryle, J., Johnson D.H. (eds) What happened at Wunlit? An Oral History of the 1999 Wunlit Peace Conference, 2021.

8 https://www.csrf-southsudan.org/repository/guidance-framework-for-understanding-different-forms-of-violence-and-their-implications-in-sout/

9 Faye, Reidun. "Barriers to Higher Education for Women in Southern Sudan," 2010, p. 18.

10 See on this point also Faye, 2010: "When rebuilding the education system, the focus should be on promoting girls' opportunities through simple measures such as separate latrines, school walls, employing more female teachers, accommodation for female teachers, gender sensibility when developing new curricula." p.13.

a low 0.3% of female South Sudanese in their age group in 2018.[11] A further challenge for the educations sector will be the significant growth of population.[12] As some studies suggest, primary education does not prepare students sufficiently for tertiary education. Further, the South Sudanese universities cannot absorb the demand for education: in 2017, 22'604 South Sudanese students studied in Sudan, Egypt, East Africa and Ethiopia (Kuyok 2019, p. 88).

A sensitive aspect when it comes to education in South Sudan is also the question of **language of instruction**. Prior to 2011, the political arguing over which language to use in schools swung between Arabic and English at the expense of indigenous languages, which have since come into the focus of education policies.[13] National languages are seen as an important part of community and identity building, however, teaching them requires qualified teachers and textbooks, both seem to be lacking (Momo 2021, p. 18). However, national languages are also a politically sensitive matter in some regions. [14]

Based on the comprehensive peace agreement (CPA) signed by the SPLM/A and the Government of Sudan in 2005, the Government of Southern Sudan (GOSS) was formed in Juba. General education was one of the responsibilities of the GOSS. **Higher education**, however, was governed by the two governments.[15] Sudanese war refugees returned to Southern Sudan and made for the largest groups of people with higher education raising the average literacy rate.[16] The years between the signing of the CPA and the first years of independence were marked by a trend towards strengthened **research in and on South Sudan**. An increasing flow of international funding supported mostly external but also South Sudanese researchers and the founding of research institutes, mostly in Juba. With the outbreak of the civil wars in 2013 and 2016, however, international funding was redirected towards humanitarian action.

The main **demanders of research products** include civil society organizations, NGOs, UN agencies, the diplomatic community, multinational bodies like the World Bank, IMF and Africa Development Bank, think-tanks internally and externally, independent researchers, universities and human rights campaigners. The media and general public are also key demanders of research products. The main interest of these actors is mostly to incorporate research findings and recommendations into their programming, thus quite a results-based and output-focused type of research demand.

Competition for the few research projects funded by the UN and NGOs is very high with well-established external researchers having an advantage over emerging ones (validation workshop, Juba). Many emerging researchers especially national experts found themselves pushed away by international researchers who have gained experience, connections and income advantage to offer lower costs. Despite these daunting challenges, the government offers no legal protection, policy and structures that can increase access to resources (validation workshop, Juba).

Research barriers and risks

The **lack of infrastructure** including internet access, safe roads, access to safe flights, access to electricity amongst others and the declining economy has made conducting research in South Sudan very expensive, particularly also in comparison to other countries in the region (SSD18, SSD20).

A big risk factor of research is **safety and security** of the researchers in general, but especially on topics

11 See 'Participation in Education' data at uis.unesco.org, accessed 1 oct 2021.

12 "It can be projected, using an exponential growth model, that by 2050, South Sudan's population would have almost tripled from its 2008 population – increasing by 3.3 million between 2020–2030, 4.2 million 2030–2040 and 5.8 million between 2040–2050. By this measure, South Sudan's population is forecasted to reach 22.63 million by 2050." (Mayai, CSRF, 2020, Demography, p. 6)

13 Edward Yakobo Momo (2021) The Language Policy in South Sudan: Implications for Educational Development, p.5.

14 For example, in Malakal, there was major disagreement over which national language is to be added into the curricula as means of instruction for preschool, Shilluk, Dinka and Nuer all desiring for it (SSD07).

15 Kuyok, Kuyok Abol. "'Not yet Uhuru': Interpreting the Education System in Post-Independence South Sudan." World Journal of Education 9, no. 3. https://doi.org/10.5430/wje.v9n3p82. p. 2.

16 These returnees had (educational) ties to Uganda, DRC, Kenya and Ethiopia (Faye 2010, p. 21), which is relevant to note when assessing researchers' careers and networks.

that are perceived to be sensitive or critical to the government (validation workshop, Juba). Even the respondents in research tend to openly decline from responding to certain topics like security, ethnic groups and politics (validation workshop, Juba). There is no formal government body that regulates research but for every research activity, one has to obtain several clearances, including from the national security institutions, line ministries, state and local governments and in some cases also from traditional authorities, to conduct interviews in the communities. These security protocols demand a considerable amount of time for coordination and securing such approvals, sometimes only personal connections and relationships help (validation workshop, Juba).

> So, when you carry out a research in that matter you see a lot of interferences here and there, just to complicate our work. This alone makes it hard for us to do our job. (SSD18)

This makes **research very elite-based and exclusive** to those who already understand the system.[17]

2.2. Follow the People in Research

> Why I took the research step is to ensure that government and other private sectors can make informed decisions based on the findings and recommendations which are developed from the research (SSD18).

This section takes a closer look at the biography and professional life of researchers and academics in South Sudan and the career possibilities they have. As came out strongly in the validation workshop in June 2021 in Juba, research in South Sudan is driven by individual interest, passion and commitment. For most respondents, their research career emanated from a passion to learn new things and was built around the university degree experience. What motivates these researchers is the interest to produce knowledge, to understand local dynamics and propose solutions to policy makers, and hence contribute to development. More critical voices draw attention to the low ambition of university staff to conduct research – due to the challenges mentioned, but also due to the lack of a consistent and regular academic research engagements, which would hone research skills and lead to professionalization (SSD23).

Economically speaking, an important driver of local research careers within the nascent research industry are UN or NGO sponsored studies. One respondent said he strengthened his research career at the time he worked as technical adviser with a World Bank project embedded inside the national Ministry of Transport. "I have to be a researcher to help young South Sudanese get jobs and we can change the country. So far, I have done several research projects for different NNGOs and INGOs with my team so I decided to have a firm so that we can be easily be contacted" (SSD18). Interviewees critically regarded the effects of these different motivations and some observe that research has become externally initiated, that there are employment issues and that the focus is income-centred due to the absence of institutionalized processes or structures that would guide and promote the research industry.

When describing typical careers, the interviews confirm the assumption that many South Sudanese re-

17 Elites, however, are not a homogenous group in South Sudan, on the contrary: "Elites and intellectuals are suspicious of each other, and will never engage in constructive debate on the pressing issues facing the country, because they hail from different ethnicities or regions." (Nyaba 2020, Deadline Extension, p. 4).

searchers study abroad, e.g. in other East African countries. Uganda was mentioned most, but also in Kenya, the US, UK and Europe. Researchers usually go abroad to complete their masters' degrees and especially also to pursue a PhD. While there are MA programs running at the South Sudanese universities, there are only few options to continue an academic career towards a doctorate or post-doc.

There are limited scholarships available through INGOs and UN organisations, but they are linked to the organisations' development programs and usually come with predetermined topics and conditions and they are highly competitional. A few bilateral scholarships available by the government, however, they seem to be offered to students along ethnic lines. Those researchers who continue their studies within South Sudan face the challenges of a 'fragile' research system in the form of weak infrastructure and research facilities: lack of internet connectivity, no access to hardware and software, lack of libraries, bad security situation, etc. It is due to these challenges that they struggle to be competitive in accessing scholarship opportunities or applying to international universities for studies abroad.

Many respondents believe that the research motivation of different actors is exclusively driven by the collective interest to help institutions and communities to discover new ways to resolve complex problems the public is facing. Others see this critically and mention personal benefit to further a career.

When assessing the risks for researchers who work on South Sudan, many interviewees suggested to **differentiate between external and South Sudanese researchers**. Among the South Sudanese researchers, those who are positioned close to the government, "enjoy security in their research" (SSD23). While all researchers have to make sure whatever they write is not taken out of context, external researchers have more (financial, logistical) options to withdraw from the context, as an interviewee said: "they can write whatever they want and never come back" and mentioned the example of a non-South Sudanese researcher who published on war in South Sudan. This researcher faced serious campaigning against the launch of the book, even from renown South Sudanese researchers. (SSD26) Thus, interviewees also draw attention to the different directions, where criticism may come from – from governmental authorities, but also from within the research community (for more on these risks, see the section on 'Risks of Sharing Research Findings).

Linked to this, a further challenge researchers have to navigate during their careers is that of adhering to scientific standards and research ethics, while scrutinizing reports for sensitive information. A South Sudanese researcher mentions the challenge of obtaining research permits and adhering to research ethics: "Researchers are depending on their own connections for their security, for data collection. They may be able to collect simply because they happen to know the security guys in a certain area, but not because they have a letter with a mandate from somewhere. Which also has its limitations: You end up taking persons on board because they have access and not because they are the right persons for the job." (SSD26) This may also lead to absurd situations, where locally-based researchers should clarify security aspects and provide information on their safety measures, but "in reality, we cannot clarify certain aspects, such as how we can protect researchers. The research you are assigning him to is changing him, he'll be somebody different, somebody who is asking questions, in some contexts this by itself can be a problem, **the research he is going to do will be changing his identity.**" (SSD26)

Thus, the continuous security threat and **(self-) censorship** for those who work on politically sensitive topics is one **reason for dropping out of an academic career**. As one post-doc researcher puts it: "Is it better to go, use the academic experience and become an independent publisher, author and researcher, sitting far away in Cameroon and writing the things that need to be written? These are things we are all asking ourselves." (SSD22) Consequently, this dropping out of more experienced – and often also of the more critical – researchers leads to a lack of **potentially qualified academic supervisors** for junior students and graduates.

Additionally, how researchers are perceived by stakeholder, donors, but also society more generally, influences their ability to move within high-risk contexts. Collecting sensitive data and conducting interviews on politically difficult topics can raise expectations (e.g. of getting paid for providing information or of receiving other forms of aid) or suspicion. Many respondents mentioned the importance to repeatedly clarify to outsiders, what their role, mandate and interests are (purpose of the study and who will use the findings), as they have experienced accusations of spying, to making profit or being labelled as rebel.

Validation workshop participants and interviewees describe the **lack of trust** between researchers and government actors as a main challenge. A few interviewees suspect that such a negative perception of researchers is due to the fear of politicians that misconduct or bad governance could be exposed, in the words of a research consultant: "Government fears the public getting to know what they don't know." They note that the government should embrace the benefits of research and open civic space to ensure independence of researchers in carrying out their work.

Researchers mentioned the poor funding situation in research as a further **reason to drop out** of an academic career and seek paid work within the government, NGOs or INGOs in South Sudan. Some continue their research work on the side, financing themselves through their employment. This, however, leads to a considerable workload for these individuals, who balance a fulltime job, personal research projects and in some cases on top of that external mandates. Taking on different roles and responsibilities in a high-risk context such as South Sudan has further implications on researchers' perception and network and on the quality of research, too. Hence, their access to social, economic and political spheres influences their ability to take on different roles and identities. Another issue raised by interviewees is that of visibility (are they being approached by donors, e.g. to conduct mandates?) and lack of career options (SSD19).

Lastly, a more general question was raised in interviews, as to what attention and importance is given to **formal education and degrees** or to what extent professional experience should be valued more. This becomes decisive for example when (I)NGOs are hiring according to 'standard' job descriptions and qualifications' expectations (SSD21).

In brief, researchers in South Sudan have limited career options, particularly on a post-doc level. In order to make a living, researchers turn towards mandated research, which is often close to development programming or policy. When working on sensitive issues they are in constant need of clarifying their role to authorities and getting access to information. This navigation of risks heightens the pressure on individual researchers and leads to brain drain and dropping out of well-qualified and dearly needed experienced academics as tutors for upcoming researchers.

2.3. Institutions: Research and Knowledge Actors

This section focuses on research and higher education institutions, think tanks, NGOs, etc. to understand which institutions advance research, get insights in their operational logic and degree of influence with regard to research and policy.

As of 2005, South(ern) Sudan had three major public universities: The University of Juba, Upper Nile University in Malakal and Renk, and Bahr el Ghazal University in Wau.[18] The three national universities are engaged in **academic research** to some extent (Jok 2016). No private research institutions existed by 2005. By 2011, the country's higher education sector had mushroomed with dozens of private and public universities, the majority of whom do not have the necessary infrastructure, equipment and competent

18 These universities have medical schools, veterinary science, environmental studies, natural resource management, architecture and geology. This is in addition to humanities and social sciences, including the School of Public Policy and the Institute for Peace, Development and Security Studies IPDSS at the University of Juba (Jok, 2016, South Sudan country profile, p. 5.).

teaching staff. Now, South Sudan has five functioning public universities and two accredited private universities, which host 36'000 students in total. 2500 students are enrolled in the seven technical and vocational education institutions (TVET).[19] The main practice- and policy-oriented research suppliers in South Sudan are a handful of institutions: the public universities[20] to a limited extent, and mostly national research institutions or NGOs.[21]

When assessing the **universities' role in South Sudan**, it is important to keep in mind that many were relocated several times during the civil war. The University of Juba, which is the oldest university in South(ern) Sudan, was moved to Khartoum in the 1980ies, and relocated back to South Sudan after 2005, but the well-established institution had to leave behind valuable resources and infrastructure – experienced academics, buildings, libraries and laboratory equipment. Also within South Sudan, universities were relocated, e.g. the University of Upper Nile in Malakal was moved to Juba after the decline into civil war in late 2013. Such relocations also tend to have political implications of having an institution closer under national government control. However, technically, each major region in South Sudan should have their university and interviewees observe a risk of a 'shotgun approach' to the scarce funding available and a risk of 'tribalization' of universities. This risks reinforcing division across the country, e.g. if international funding is focusing only on certain institutions and strengthens their regional cooperation (e.g. the South with Uganda, the North with Khartoum).

On an **international level the main research providers** in and on South Sudan include the Rift Valley Institute RVI and Center for Strategic Policy Studies CSPS, the multi-stakeholder Conflict Sensitivity Resource Facility CSRF, East Africa Research Fund EARF, Windle Trust International, the Institute for Security Studies SIPRI, the Conflict Research Programme LSE, the Secure Livelihoods Research Consortium SLRC, German Institute for Global and Area Studies GIGA, The International Livestock Research Institute ILRI, Mawazo Institute – Women leading Research in Africa and the Feinstein International Centre. Validation workshop participants noted that most INGOs and UN conduct research to inform their programming and not necessarily to answer critical questions on which the public would need facts. There are also external research funders and suppliers such as the World Bank, the African Development Bank, the International Monetary Fund, IDRC, Democracy International, to name but a few.

While the Ministry of Higher Education is responsible for all universities and has its own research unit, the latter remains underfunded and is struggling to pay salaries. Several **government** ministries and entities like the central bank possess research directorates and units, such as the National Bureau of Statistics, the National Research Council and the Council for Higher Education, and they sometimes cooperate with other (research) organisations to produce research, e.g. with the SLRC or the FAO. However, ministry units produce hardly any (publicly available) data, analysis or research products. These units have neither funds to do research nor salaries. Consequently, researchers working in these governmental research units "find a way to greener pastures, where they get paid the way they should be. Where do they go? Of course the NGOs are taking them. The same NGOs who are saying, 'we want to build capacities of these local guys'." (SSD26). This leaves government departments, who are supposed to produce evidence to inform policy without researchers.

If academics are doing their research in the framework of consultancies, who tend to result in grey literature, then the university as academic institution and faculty colleagues hardly benefit from this research. As one respondent put it, if faculty members are not doing research, they won't be able to teach students on the basis of research and "if academics become consultants, the whole country is on a trajectory, being dictated by development research" (SSD06).
"Who is doing research? It becomes a question of NGOs who are actually driving research. It would be

19 Akec 'Status of Higher Education and TVET in South Sudan 2021, p. 5f.

20 See research actors mapping: University of Juba, University of Bahr el Ghazal in Wau, University of Upper Nile in Malakal (but currently still in Juba(?)), John Garang Memorial University of Science and Technology, University of Rumbek, University of Northern Bahr El-Ghazal in Aweil and the Catholic University with a campus in Juba and in Wau.

21 Like the Sudd Institute, Ebony Centre of Strategic Studies dealing with economic issues, the Institute of Social Policy and Research, the South Sudan Centre for Strategic and Policy Studies and the Centre for Strategic Conflict Analysis (CESCA). Further research actors include The Bridge Network, Dialogue and Research Initiative (DRI), Foundation for Democracy and Accountable Governance (FODAG), EVE organisation, South Sudan Law Society, Community Empowerment for Progress Organization (CEPO), the Nile Institute for Peace & Development and Skillmaxs. See the Research Actor Mapping in the Annex.

very different if the Government would be the one directing research and NGOs. Because NGOs are there for specific reasons, they have specific policies, whether donors or implementing NGOs. And even the research they do is to fit into their log frames. Is this what the people want? Does it feed into policies? Is it what people want? The research being done by NGOs, because of sensitivities of situation in SSD – and I need to mention the NGO act of 2015: to regulate NGOs work. When Gov started perceiving that NGOs supported rebel movement with the agenda to change the regime. They came up with very strict rules guiding NGOs. Unfortunately, foreign researchers are grouped as NGOs as well. A colleague joined me in Yei. Because she was a foreign researcher, she was assigned a national security guy to sit next to her." (SSD26)

An increasing perception among donors and researchers seems to see the central government as being the problem and the question arises, whether there is an option to bypass the central government and work directly with local institutions. However, as a researcher who did a donor-funded analysis on this describes: "no, it's not possible to bypass the central government, simply because, who is the staff of the local government? They are all employed by central government." (SSD26).

This lack of trust is linked to accusations of corruption and nepotism within government and public administration. Interviewees mention that having qualifications to meet a job description may not be decisive whether a candidate is successful, but rather his familial ties. This reduces the legitimacy and importance of education and professional experience.

There is a tendency of research institutions to operate in and focus on Juba solely, a phenomenon also known in the development sector and called 'Juba-Bubble, disregarding the various other regions of South Sudan that host (smaller) universities and researchers. There are few examples of organisations who counter this tendency, who carry out research in different local areas and connect locally-based researchers with donors. However, they, too, face challenges of building and retaining capacities and brain drain.

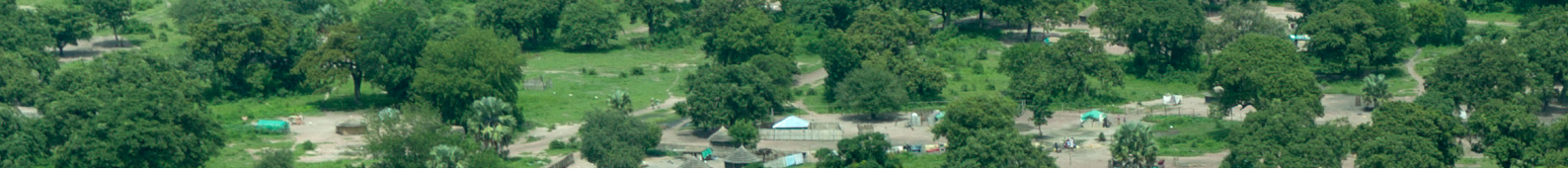
To conclude, the knowledge ecosystem in South Sudan is coined by a few independent (or semi-independent) research think tanks and NGOs and international research partners, which work both on practice research mandates and to a lesser extent on academic research, as in regional or North-South research partnerships. As is the case in many 'weak' or 'distorted' research systems, universities in South Sudan are mostly institutions of education and less so for academic research. Government institutions seem to not to play a very conducive role in strengthening locally-based research.

2.4. Financing Research

Following 'the money' in research is quite a challenge in South Sudan. Hardly any data could be collected on how much researchers earn or how research is funded within individual sectors. In general, differences can be observed in the financing of "applied research", which is mandated and linked to specific programs and "purely academic research" driven by self-interest for academic recognition (SSD23). The latter type of research appears to receive significantly less funding in South Sudan, simply because only few funding schemes exist which would foster academic research. Thus, researchers either opt for paid, mandated research, where topic, scope and even methodology are often predetermined by the donor, or they cross-finance academic research through other paid work and consultancies.

Many interviewees mentioned, that even the University of Juba (UoJ) cannot finance academic research. The university is in a precarious situation, financing itself through public funds, student fees and international cooperation projects, where the institute takes an overhead of approx. 30%. However, throughout the past year it repeatedly paused paying salaries to their staff. As the UoJ's vice-chancellor pointed out during the 2021 graduation speech, staff salaries have not risen in the past six years despite the considerable rise in cost.[22]

22 Speech by VC Prof. John Akec at the 23rd Convocation of the University of Juba, Saturday 19th June, 2021.



There is also a significant lack of funding in public education and it remains unclear how oil revenues, non-oil revenues and borrowings are spent – as the ICG put it: "Public finance is a mirage in South Sudan: its oil industry is notoriously opaque, and even many top government officials do not know how much money the treasury holds or how it is spent. Meanwhile, public officials and soldiers go months without pay. The country's funds instead prop up a core security state and off-the-books patronage, which many South Sudanese now believe has simply turned into looting." (International Crisis Group 'South Sudan's first decade' 2021)

Due to the lack of infrastructure and security challenges, research is a very expensive undertaking in South Sudan. Yet, there is no government research funding mechanism that would finance local researchers. The main funding sources of research activity in South Sudan are individual savings, consultancy fees paid for by UN and NGOs and external research institutions. One interviewee stated that "my source of funds always comes from my personal savings to start my firm. Then after establishing the firm it took us good months without getting any contract, but what we did was to carry our personal research then there after we started getting contracts and we moved on. Our income always comes from our clients and we always share with our team" (SSD18). Another researcher said that "my research is funded through consultancies and some are funded by organizations or other agencies. For example, the study on the political economy was funded by a regional research donor" (SSD20). Thus, the research funding landscape is mainly dominated by international actors such as UN agencies, NGOs and international research funders.

There are a few regional research funding mechanisms including the UK funded East Africa Research Fund (EARF), the Africa Economic Research Consortium (AERC) and the Open Society Foundation (OSF), in addition to other global research institutions that South Sudanese researchers can access. However, the competitive nature of these funding mechanisms, the demand for quality and strict compliance requirements has made it difficult for South Sudanese researchers to gain access to these funds.

In donor-dominant funding schemes the research agenda is usually predetermined and coined by the funding agencies' policies. They define the goal, expected outcome and they own the product. Consequently, the research is based on the funders' needs and "not on the prevailing needs in the community" (SSD20). In order to generate more locally-led research outcomes, a research trust fund, similarly to small grants programs, such as the one led by the Australian Embassy in Ethiopia, was mentioned as possible solution.

Funding seems to be easier accessible for institutes working on health and medicine, engineering, finances, agriculture, education, gender and peacebuilding and a few interviewees mentioned that there are not enough funds for teacher education. However, others mentioned that donors have focused on education in the past years – it is thus ambiguous to draw a conclusion as to which topics receive more attention and funding, as will be elaborated in more detail in the next chapter.

While there has been substantial funding to research in South Sudan over the past decade, due to a lack of donor coordination, it is hard to quantify the amounts. "It is also difficult to draw the line between 'regular' development aid and specific funding to for, or to strengthen, research." (Jok 2016, p. 11).

2.5. Ideas: Their Transfer & Exchange

This section focuses on what topics are being researched in South Sudan, what happens with research results and on consequences of researching sensitive topics.

Common research themes cited include governance, economy, service delivery, infrastructure and peace and security as key areas where research findings and recommendations can foster sustainable devel-

opment. For South Sudanese researchers, it is critical to retain the ability to design independent research based on emerging issues in the country. The main demanders and thus beneficiaries of applied and academic research products include civil society organizations, NGOs, UN agencies, the diplomatic community, multinational bodies like the World Bank, IMF and African Development Bank, think-tanks internally and externally, independent researchers, universities and human rights campaigners. According to the majority of interviewees, the least benefiting of research products are the government and the business community or private sector in South Sudan. However, externally mandated research is much more visible to the 'international community', which does not seem to pay much attention to what happens outside of donor funding. Interviewees indeed mentioned also examples of science-policy dialogue, i.e. when a ministry asks an academic to provide input on drafting a new policy. These examples seem to be based on individual connections and are of rather anecdotal value, but need to be kept in mind (see science-policy chapter below).

Apparently, the sensitivity of certain topics leads to a 'circular' information sharing: "there is the perception that the government is sensitive to every information. That determines outreach in terms of with whom NGOs want to share information with. E.g. they hire a consultant, they produce a good piece of evidence, and then they end up disseminate with the same NGOs. [...] So yes, there is knowledge being produced in SSD, **but knowledge that is not shared with relevant stakeholders to me is not knowledge**. [...] NGOs are still secretive, which I totally understand, because they fear that they will be kicked out if they share sensitive information publicly, which indeed had happened. They are accused to produce information that are not true." (SSD26) The same respondent continues with an example that highlights the sometimes negative perception or mistrust NGOs face: "I was in Bor, having a discussion with the secretary general of the state, who said the UN guys are opening this road, claiming to trying to help us improve infrastructure, but in fact what they are doing is they are making it easier for rebels to use vehicles and attack us. So, for NGOs either support them or you become an enemy."(SSD26)

This general suspicion and fear of research being misused or misinterpreted makes NGOs and donors very careful, who to share information with or who to invite to validation and dissemination events. (SSD26) "Unfortunately, that goes **as far as profiling between SSD researchers who should be invited**. Because 100% neutrality is not possible. There is the question, how can we guarantee that a researcher will not take information to the government." (SSD26)

As mentioned above already, many researchers interviewed mentioned that policy makers see research as a threat to their legitimacy in decision making. They see the negative perception of policy makers about the purpose and impact of research as main factor that hampers policy uptake. Lack of interest to implement research findings and recommendations seems to be very high among government institutions.

Risks of sharing research findings

> The NSS has arrested and detained people who are alleged to have communicated with, or supported, the opposition, as well as human rights defenders, civil society activists and academics critical of the government. (Amnesty International, 2021)
>
> A journalist told Amnesty International when he was interviewing an academic at the University of Juba about the peace process going on in Khartoum before the signing of the agreement in September 2018, four to five individuals interrupted the interview and shoved them both to the side. One of the individuals, who identified himself as an NSS agent, confiscated the journalist's phone that he was using to record the interview, demanded to listen the recording, and warned the journalist that if he were to broadcast anything negative, they knew where to find him. (Amnesty International, 2021, p. 36)

> Officially, there is still civil war. The government is suspicious. Some of us, who have been researching openly, I'm starting to be concerned. For example, it's a fact that the government has displaced its civilians into POC camp hosted by UN. But if I say this fact in an international conference somewhere and am heard by the government in Juba – will I be seen as traitor, as part of the West? These are some of the dilemmas. But with peace, I don't think the government would be interested. (SSD26)

In order to deal with the complex security environment, individual and institutional **censorship** is very common that stifles the essence of research in South Sudan (validation workshop, Juba, SSD18, SSD20). For many interested researchers, the content of the research report **should not be too critical to the government** or institutions one serves. Otherwise, researchers risk putting their jobs or even lives on the line. In order to illustrate the complex environment researchers operate in South Sudan, one respondent said, Another testimony on (self-)censorship states: "when I was doing my PhD, I was doing research on the conduct and formulation of foreign policy in South Sudan. With that, some of the findings that I presented were critical and some people told me to remove such content as it will bring problem to me, so I removed them. This simply means there is no freedom to conduct an independent research and come up with results that will be able to inform the policy makers' decisions" (SSD20).

"You hear of minimal cases that someone was arrested. An NGO produced a list of victims of civil war, of Nuers killed in Juba. Hoping that, as the peace agreement included an article on transitional justice and compensation, and as an implementing NGO they wanted to gather facts, which can be used for this justice. But later when civil war escalated in 2016, some of the staff involved had to flee, because they had published facts that were bitter to the government. Also, a renown academic was once put in. He is now in the US as refugee, I don't know how far research was part of his problem, but he was accused of trying to stage a coup. Another example is an academic, who was working for the government, but at a certain point he was criticized by government. Even if there are not many researchers taken in, those fears are making you cautious in writing, this is dangerous." (SSD26)

Research-teaching nexus: what is being taught?

The challenges detailed above not only impact publication of results, but also teaching on higher education level. Designing curricula and lectures on domestic politics, history or socially sensitive topics seems to be just as disputed and linked to interests. For example, the IPDSS has curricula from the 1990ies and while there are initiatives to revise and update them, the process seems to be fairly politicised in terms of content and resource distribution within the institute. This raises the question, how curricula are informed and designed in such politized environments, and on a practical level, what can actually be taught at universities.

> The IPDSS is full of generals. Have you seen generals in an academic institution, seriously? When I was teaching, I wasn't allowed to discuss domestic things. I only could look at international law, from the global international perspective. And I couldn't narrow it down to the domestic situation. [...] You have spies in your class and you must say what they want to hear. So how can you teach human rights (SSD22)

Science/policy nexus: Assessing the value and impact of research results on policy

Interviewees draw an ambiguous picture on the characteristics of a science-policy nexus in South Sudan. Some interviewees deplore the lack of any institutionalized form of exchange, e.g. when setting the research agenda or designing the research, and the lack of making use of evidence when drafting policies. Others mentioned that there are indeed policy dialogues taking place online and offline and that there are both institutional and personal contacts between academics and policy makers. The University of Juba was mentioned to play a role in this, but also different online repositories were listed, such as the ones managed by CSRF and Rift Valley Institute. The main topics present in such research products include policy development, peacebuilding, governance, education and social services sector. Further topics that are likely to come up in science-policy dialogue are water security, migration and climate change.

Funding research was part of the statebuilding intervention in the young independent state. Research played an important role in shaping policies and laws, as donors and NGOs supported the Government in different ways with drafting a constitution. For example, organisations like the Norwegian People's Aid[23] contributed to the land act by supporting the South Sudanese land commission, and GIZ supported the Government regarding the local government act. Most of these initiatives were informed by donor-funded research. After the start of civil war, there was a shift in funding to the humanitarian crisis. This had an impact on the funding and priority given to research, but also on the topics that are being researched now. Many research endeavours focus on how refugees can be supported, on people in POCs and on the impact of floods, e.g. (SSD26)

Of recent, there has been a rush into research on Covid-19. While there certainly is a need for this research and evidence, there are also drawbacks for national NGOs due to this thematic shift during a pandemic. This also linked to the idea of localization and empowering national NGOs[24] which in South Sudan, had led to the emergence of numerous NGOs. With Covid-19 pandemic many international organsiations' representations in Juba left in 2020 and became (more) dependent on locally-based NGOs. At the same time the conditionalities shifted and some organisations benefited from increased funds and greater ownership, but this was mostly true for organsations who could shift their focus on Covid-19. "This has left many NGOs redundant." (SSD26) Respondents noticed a risk that, with the focus on Covid, other dynamics are being neglected that require (international) attention, such as the implementation of the peace agreement and more generally, the politics and economics evolving around the pandemic.

The value, utilisation and impact of research results also depend on the type of research demanders. Research projects commissioned and financed by development partners such as the UN and NGOs have played a key role in shaping their programming. For example, the **shift from emergency to resilience and recovery** was grounded by growing evidence on the need to build local community systems that can absorb shocks. Human rights campaigners also use research findings and recommendations to influence global and regional policy makers to shift their policies and call for accountability. For the civil society and media, research findings and recommendations help them to conduct **informed advocacy**.

Conversely, the governments at national and state level hardly seem to make use of research findings and recommendations, unless they have mandated a researcher with a specific task, as mentioned above. The technical and political interest and capacity to use research to inform policy formulation, governance and development seems to be very low. A researcher shared that "in 2012 the SPLM did a study to understand the influence of the political party at the grassroots level, and findings were that they lost vision, direction and objectives. But they did not use these findings. As a result there was the conflict that happened in 2013. So, sometimes political decisions affect the use of research". (SSD19)
The lack of policy uptake also seems to depend on the quality of the research conducted. Some institutions that commission research mention **poor quality** of the product has led to shelving it. Lastly, the

23 https://www.norad.no/en/front/thematic-areas/oil-for-development/where-we-are/south-sudan/

24 The Grand Bargain – A shared commitment to better serve people in need, Istanbul 2016.

question was raised as to what extent the government is a involved in the formulation of research questions, particularly when it is applied research of direct concern to the government, or is at least included as a listener in the proposal of the design and is not taken by surprise on findings.

Thus, there is a high risk and tendency in South Sudan that research findings and recommendations are not being considered, let alone being implemented, and that research funds are lost without creating any impact.

> I don't think the government is benefitting a lot from the research in South Sudan, because of the hostility between most donors and the government." (SSD26)

> Here I am, producing knowledge for UN agency and I find that their work has several gaps and I highlight these gaps, that they must respond to these issues before they expand, but they say no, we must expand. This is the problem with the knowledge produced by CS and NGOs. But still, we appreciate them for being at the forefront and every day, we read their work. And sometimes, even when we write for academic institutions, they take it, they disseminate it." (SSD22)

Examples of research fields and topics to understand how the research/policy exchange works in practice (or doesn't) include the building of a Nile water dam, the National Dialogue (e.g. through publications by the SUDD institute) and the question of land use (ownership, zoning and land acquisition). For example: "sometimes as a researcher, you're invited as an individual or as an entity to come and make a presentation to some government entity based either a previous research you have done or any other research that the government is interested in. For example we were given an opportunity to give input on the petroleum law and policies in South Sudan" (SSD19).

And he went on to say that due to civil society pressure, especially on the oil pollution, after a convincing amount of evidence on the negative impact on communities and wildlife, "the President issued an order to constitute a committee to investigate environmental damage caused by the oil exploration". This is how research can positively contribute to policy making and actions by the government.
Other positive examples of research uptake were found in the NGO sector, where research is mandated to inform programmes and strategies.

"Some NGOs are actively using my findings on state borders and conflicts. The paper drew attention mainly from donors and practitioners to understand the dynamics so that they can help when implementing their projects." (SSD26). The same interviewee continued on the influence of donors in this regard: "Donors are powerful. The government is struggling financially. I don't have sufficient evidence, but I think that President Kiir was forced to abandon the idea 32 states and go for the ten states forced by donors." (SSD26).

<u>The role of civil society and the media in using/publishing research findings</u>

> The Government uses different strategies to intimidate. The civil society and media face a lot of challenges, they differ, but particularly media either you sing the song of the government, or you find yourself in trouble. Radios like Miraya FM has a certain freedom[25] because they are in the fence of the UN. They can say some facts that are displeasing to the government, but in the end the staff need to go home. (SSD26)

25 Although Radio Miraya has been under embargo by government for almost three years now. They cannot participate in news gathering or reporting outside their UN compound.

When it comes to civil society, one needs to closely look at their networks and affiliations to assess to what extent they are 'civil'. Many CSOs are backing either SPLM-IO or the government and some of them are more political organizations than CS. They may also use such affiliation and links to get access to areas they otherwise wouldn't be able to access. However, this may also mean that they indirectly support rebel groups for instance. Before the peace agreement in 2005 South Sudan had a vibrant civil society, but after that the NGOs disappeared and most staff went to join the government (SSD26). The Media law is very strict on what can be said and what can't be said. This limits media and South Sudan was ranked low in reports on freedom of press. These reports include factors such as the numbers of journalist killed. "Many vocal journalist were killed, simply because they are saying the facts. A prominent example, Isaiah Abraham, was very vocal, very critical" (SSD26).

The civil society and media play an influential role in dissemination of research findings and recommendations. For the public, they are responsible to unpack the findings and recommendations into plain language that can generate public understanding and ownership. Civil society was described as "the mouthpiece of the population and they are to disseminate the information available either through activism or media engagement. They also help bridge the gap between the government and the local population and they do this by raising concerns to the government on things that are not done well and speaking to the population on what they should do to keep the government on their toes." (SSD20)

Many respondents agree that media in South Sudan take research as something trustworthy and reliable and communicate policy recommendations from researchers. Most recently, this can be seen in the attempt of the 'People's Coalition for Civil Action', formed in August 2021. As Radio Miraya communicated in a tweet on July 30, 2021: "A group of academics and concerned citizens formed a pressure group to advocate for a peaceful and just society. People's Coalition for Civil Action include Civil Society, Academia, etc. with an objective of mobilizing #SouthSudanese to influence the country's leaders and policy makers." The Coalition's call to protests remained unanswered by the public, be it because the government had announced violent repression in case of street protests, because the coalition did not convince people or because they did not perceive them as a viable alternative.

From the researchers' side, there is a strong wish and interest to enter into a dialogue with policy makers and to present research findings. Research funders could facilitate a dialogue with government institutions such as the Bureau of Statistics, the Ministry of Higher Education and the National Research Council (to be supported/established). The challenge of policy recommendations from researchers is whether policy makers see it as criticism and personal offence or as useful perspective. This very much depends on the language used and the challenge is to write in a language the government is willing to read, "which doesn't mean you're not critical, but you offer a way out" (SSD06).

2.6. Recommendations how to Strengthen the Knowledge Ecosystem in South Sudan

Challenge: Research governance and lack of career options

"There is a tendency to do the empowerment superficially: assign researchers certain projects and as part of the process train them in data collection methodology, but in practice once the research kicks off, it becomes not practical. There can be better ways. Examples: if I'm not mistaken RVI trains researchers on research methodologies, even took them to Nairobi." (SSD26)

The South Sudanese researchers who were interviewed wish for a robust, sustainable and predictable research industry that would allow for a research career. They highlighted the importance of creating respective government policies and an institution that will provide research funds and some

even wished for an institution that would regulate the conduct of research, the rational being that this would counter unclear processes to get clearance for field research or sensitive research topics.

In the long-term, validation workshop participants wished for policy guidelines and a legal framework that would protect researchers as well as funds to promote local content. This would enable researchers to maintain a level of ethical standards and not being exposed to safety and security risks.

Recommendations:

- National research capacity has grown, donors should localise research activities or adopt hybrid approach of ensuring international researchers partner with local researchers.
- Strengthen visibility of local researchers by including them in review processes, publications, data collection efforts, etc. to increase attention to the importance and relevance of locally-created knowledge products.
- Finance PhD programs – both in-country and abroad – to ensure accessibility to young researchers with family obligations.
- Encourage a discussion with South Sudanese policy makers on how research governance in South Sudan could be improved, e.g. through joint stakeholder meetings.
- Work with individual authorities, like the research council or the Ministry of Higher Education to provide support in establishing transparent and fair research guidelines.
- The public administration and I/NGOs could publish research topics, which students could choose to write their final papers on. This could create connections useful for students when trying to find a position after graduation.
- International donors could use their power position to put pressure on Kiir to allow for more transparency and support research on taxes and how public funds are spent. This would provide donors with evidence on public finances, most importantly, accounting of oil income (International Crisis Group 2021).

Challenge: Weak infrastructure

Researchers in South Sudan lack access to a conducive work environment. This starts with low connectivity and limited phone coverage (access to internet and reliable electricity, mobile networks cover about 20% of the country, about 17% of the population has access to internet), a lack of libraries and online databases and continues with a limited road network, and simply, the lack of a decent place to work.

Recommendations:

- Include budget for internet bundles.
- Grant access to journals and databases, e.g. through affiliation of researchers to partner institutions' networks.
- Include budget to rent offices or hotel rooms for writing or focused work.
- Include travel budget to safely access remote areas.
- Create partnerships with universities that involve both research collaborations as well as infrastructural components.

Challenge: Safety, security and perception of researchers

Risks when travelling for field research are numerous in South Sudan, including dangerous roads, traffic risks and criminality. Researchers worry about their personal safety, but also about their (mis-) perception as aid workers or spies when travelling in the country and conducting interviews, e. g during mandated research, this leaves consultants with the question of who takes responsibility and liability for what types of risks. Additionally, data security, the risk of information misuse and adhering to research ethics under these circumstances poses a challenge.

Recommendations:

- Discuss security and safety with researchers: what are immediate risks, what may be long term implications if they publish on sensitive topics or if they travel to certain areas? How likely and how big are these risks and who is able to carry which responsibilities?
- Use synergies and draw on security infrastructure and information of other donors or networks.
- Provide digital infrastructure, including the necessary training to use it, to facilitate safe data management and adherence to research ethics.
- With regards to negative perception of researchers: conduct conflict sensitive research training, adapted to local level, for researchers and research institutions. This would equip researchers with methodologies and communication and writing skills to encounter negative perception.

Challenge: Conditional and unpredictable funding and lack of non-earmarked financing

When it comes to practice- and policy-oriented research, donors mainly set topics they want to have researched and it is difficult for South Sudanese researchers to get funding for topics of their own choice. Funding emphasis is mostly on humanitarian aid and on basic/secondary education, without also putting emphasis on higher education (Leben & Tolani, 2021, p. 13).

Interviewees recommend for donors to establish and finance predictable research funding mechanisms at national level that can provide grants both for independent researchers and locally based research organizations, so that researchers can set the goal and direction of their research without much external conditions related to the content.

Recommendations:

— Create/support funding hubs or start-up research grants for academic research, a trust fund or a scholarship program with an independent commission guaranteeing equal access for men, women and representation of different ethnicities, and evaluation based on merits.

— Launch softly-earmarked calls and grant frameworks, where researchers jointly set research objectives with research funders that address needs and interests of the community or provide input on policy-making processes.

Challenge: Centre/Periphery – the 'Juba-Bubble'

"If you look at NGOs in rural areas, remote NGOs are more disadvantaged, because they have no access to internet, only Juba-based NGOs are visible who are able to talk to donors and increasing chances of getting funding, not only for NGOs but also researchers." (SSD26)
The majority of research funds seem to flow through Juba, this leaves donors with a 'Juba-bias'.[26]

Recommendations:

— Strengthen research partnerships with locally-based institutions and researchers collaborating with researchers across South Sudan, conduct research also outside of Juba (see e.g. the CSRF and swisspeace).

— Increase the diversity of researchers who contribute to the knowledge production in and on South Sudan, e.g. through expert rosters as the CSRF uses them.

Challenge: Lack of accessibility / reluctancy of sharing research products

The knowledge that is produced, particularly that funded by international actors, often remains inaccessible to a broader research community and ends up as grey literature. This may be due to sensitivities of data contained in these reports or due to contractual limitations by donors. Existing data and

26 his is also evident in the educational sector. The quality of education is particularly low in rural payams, villages and bomas (Leben & Tolani, 2021, p. 11), where they lack the funding and qualified teachers.

lessons learnt from the past are not used to their potential, this creates inefficiency and duplication with actors starting data collection and analysis from scratch. (ACAPS 2021). An additional challenge is to get up-to-date data and data that speaks to a specific region.

Recommendations:

— Support initiatives such as the repository of the CSRF, which collects publications on South Sudan and makes them easily searchable in a database and publicly available; consider also sharing of raw data, potentially through independent/non-operational (research) actors who face less risks, establish data sharing protocols (see also ACAPS 2021 recommendation on data storage and data sharing).

— Incentivize knowledge producers and research donors to publish anonymized versions of their data/research, even if it is grey literature – without putting researchers at risk.

— Encourage public lectures and symposiums on research products in universities and other institutions to create demand.

Challenge: Quality assurance of research and policy evaluation

On a more general level of reflection, a challenge remains how research can contribute to incorporate learning and evidence in evaluations and when designing programs and strategies.

Recommendation:

— Use learning oriented monitoring and evaluation approaches to both research conduct (to ensure research quality) and to policy making (i.e. assessing how evidence-/research-based policies are).

— Continued capacity building of national researchers.

— Support the establishment of a professional research body to act as self-regulatory entity to assess research work and offer feedback/capacity building. This could be linked to existing networks such as the South Sudanese Studies Association, RVI's researcher networks or similar.

— Challenge: Capacity (individual and organisational)

— When considering building capacity in a 'disrupted' knowledge ecosystem, not only career and individual skills should be invested in, but also the quality of organisational development improved.[27]

27 See for instance Peace Nexus' work in organizational development in peacebuilding: https://peacenexus.org/services/organisational-development-support/

— Offer coaching on organisational development and strategy development processes.

— Support networks, similar for example as the Conflict Sensitivity Community hub, that facilitate experience exchange among research organisations and think tanks.

Challenge: Lack of evidence informed policy making / lack of use of existing assessments

Existing policies and practices are not sufficiently evaluated and assessed, South Sudanese researchers are rarely included in such analyses. And if there are assessments or lessons learnt, e.g. on past crisis management, on humanitarian aid delivered, these lessons learnt are hardly drawn upon (ACAPS 2021). Research findings were mentioned as an important factor to build legitimacy for the advocacy role of civil society. Thus, the more evidence-based activists' demands are and the more they can build their recommendations on analysis, the more the civil society can be strengthened within South Sudan.[28]

Recommendations:

— Build capacity in evaluation of government policies and in anticipatory analysis and scenario development.

— Invest in or contribute to a repository of lessons learnt and previous assessments (also prior to 2011!) within the donor community and more broadly, e.g. through the CSRF.

28 One particular project related to the implementation of the peace agreement was mentioned (the Peace implementation monitoring initiative, PIMI) as good practice addressing this link and was directed to policy makers. In that specific case, international partners also played an important role by increasing pressure on policy makers to address CSO's demands.

Further reflections on overarching/contextual challenges:

Implementation of the peace agreement

> All in South Sudan depends on a successful and realistic implementation of the peace agreement." as one interviewee put it. This is also true for the research in South Sudan, hence, "once there is peace and stability, the Government will not have time to be focusing on who is researching on what and who is supposedly spying on what. [...] E.g in Khartoum, academics can produce the harshest reports, the government would say 'they are just academics'. We are waiting for this in SSD. But if research can put you in detention centre, it's risky. And this will continue to be the case as long as there is still civil war in the country. (SSD26)

Elections are supposed to take place in the near future, which most likely will feature Kiir against Machar. This could lead to an increase in violence, and chances are low that the loser would concede without resistance. What the country needs is a politic of consensus. (International Crisis Group 2021) Thus, the questions arise how research can contribute to more consensual politics and what role research can/should play in supporting reform-minded elites to discuss a new federal constitution. The national dialogue revealed broad support for decentralization, e.g. by better sourcing local administrations.

One interviewee mentioned that donors would have the power to put emphasis on the importance of implementing the peace agreement. This could come into play when discussing conditionalities of cooperation.

Documentation and Reconciliation

As policy processes and decision making are not documented and thus have little accountability, the suggestion was made that research could contribute to this documentation and increase transparency and accountability of governance. One idea that came up, was to further invest in the **archiving activities** that have started a few years ago with the South Sudanese National Archive.

Getting the private sector on board

In this case study, the role of private sector actors was not assessed in detail, but some interviewees pointed to the lack of involvement. The private sector also needs to be sensitized on the importance of building a strong research foundation for their businesses.

Nexus approach

Working through a knowledge ecosystem approach can also strengthen the humanitarian-development-peace nexus through improved data, evidence, networks and processes, as well as through better trained and connected researchers and consultants. This framing could be used, when approaching other aid funders, beyond the classic research funders, to invest in tertiary education and policy uptake.
Also the other way around, the aid industry should be linked with the local knowledge ecosystem, so that it feeds into agenda setting of practice-oriented research and eventually into teaching and education.

Further, such a nexus perspective could also be adopted by transdisciplinary approach, linking universities and think tanks with (I)NGOs.

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