

Access-Authority Nexus in Farmer-Herder Conflicts (AAN)

STATE OF THE ART AND RATIONALE

Access-authority nexus in farmer-herder conflicts (AAN) investigates the dynamic processes of formation and erosion of access, identities and authority in spatial and historical perspectives. Through a theoretical lens guided by political ecology, and in particular the concepts of frontiers and territorialization, it understands the conflict as a dynamic process whereby people seek access and try to legitimize their claims as property. Governing institutions (statutory, customary and hybrid) compete over the validation of claims and as a consequence constantly build, maintain, or lose their authority. This is state-building in the making. The approach taken in AAN offers a novel way of investigating natural resource conflicts as part of state formation.

Farmer-herder conflicts constitute a major area of natural resource conflicts in Ghana and the West African sub-region at large. Several instances of the conflicts have been reported in the region, particularly in Ghana and Nigeria, with some single instances recording more than 80 human deaths¹. The competition over land has social, political and institutional consequences. While there is an ethnic dimension to the conflict which makes it easy to fuel with tenacious stereotypes, the conflict is more fundamentally about the categorization of landscapes as pasture or farmland, the recognition of claims as rights, and the constitution of public authority. In short, the conflict between herders and farmers is an instance of state building at the local scale.

Mainstream work on resource conflicts has focused on root causes such as 'environmental scarcity' (e.g. Baechler, 1998; Collier, 2010; Homer-Dixon, 1999; Kaplan, 1994) and 'institutional failure' (e.g. Goldman, 1998; Peters 1987). Over the past three decades, studies generally adhering to political ecology orientation have attempted analyses of how socio-political, ecological and economic factors jointly contribute to conflicts and how conflicts played out in a local arena may be associated with structural changes taking place at higher scales (e.g. Boone, 2013, 2017; Escobar, 2006; Hall *et al.*, 2011; Peluso *et al.*, 2012; Robbins, 2010). In relation to natural resource conflicts in Africa, scholars have pointed at unfavourable agricultural policies (Bassett, 1988), anti-pastoral policy environment (Benjaminsen *et al.*, 2009, 2012), lack of state presence in rural areas and corruption (Benjaminsen *et al.*, 2012) and climate change (Olaniyan *et al.*, 2015).

In AAN, we combine political ecology with the theorization of *frontiers* and *territorialisation* to study the process of state building. Frontiers may be understood as "sites where authorities, sovereignties, and hegemonies of the recent past have been or are currently being challenged by new enclosures, territorializations, and property regimes" (Peluso and Lund, 2011: 668). Such a conceptualization moves away from a classic understanding of frontiers as linear movements in space and time (Geiger, 2008; Turner, 1921). Next, territorialization is defined as the creation of systems of resource control, e.g. rights, authorities, rules and laws (Rasmussen and Lund, 2018: 388). New situations, in this case, herder migration into new areas, establish frontiers and challenge existing patterns of access to resources and simultaneously reinterpret, reinvent, and

¹ Recently reported cases include:

1. <https://www.dw.com/en/west-africa-fulani-conflict-getting-worse/a-43679371> , <https://www.dw.com/en/farmers-nomadic-herders-clash-in-ghana/a-19028767>
2. <https://www.bbc.com/news/world-africa-44597409>
3. <http://citifmonline.com/2017/10/29/9-dead-after-fulani-herders-and-farmers-clash/>

recycle institutional orders (Rasmussen and Lund, 2018). Frontiers are thus linked to social and political struggle, and the process of territorialization prompts new claims of access, legitimacy and authority. AAN will study how politico-legal institutions build, maintain, or lose their authority through the dynamics of frontiers and territorialization, and how this translates into enfranchisement of rights for some people, and loss of rights for others.

The processes of frontiers and territorialisation have linkage with the process of state building. Territorialization and authority are mutually constituted. That is, people in frontier situations struggle over access to natural resources and attempt to secure their access by having their claims recognized as legitimate property by politico-legal institutions. Simultaneously, those institutions that are successful in recognizing, providing and enforcing these claims as property build and solidify their legitimacy in relation to competitors (Sikor and Lund, 2009). Hence, struggles over property are as much about authority as they are about access to resources; thereby constituting a “contract” linking property and authority (Sikor and Lund, 2009). Thus, those who can define and enforce rights to resources effectively rule (Rasmussen and Lund, 2018: 389).

While the impact of economic shocks (e.g., price changes, sudden climatic changes, loss of work, and illness) on household income and wellbeing has been extensively studied in development economics, the impact of civil conflicts on livelihoods is much less well understood (Justino, 2011). Most recent empirical studies on related topics focus on the impact of conflicts on the country’s national economy (e.g. Lindgren, 2005), on mortality rates (e.g. Tabeau and Bijak, 2005) and on the effect of conflicts on the incidence of poverty (e.g. Goodhand, 2003). Much less attention has been devoted to the estimation of the effects of conflicts on household income and wellbeing and on understanding how households change their livelihood strategies in conflict situations. Following Justino (2011), both direct (i.e., changes in household composition, destruction of assets, and forced displacement) and indirect (i.e., on social networks, markets, and politico-legal institutions) costs can be expected on household livelihoods in times of conflict. This study will aim at quantifying the prevalence and value of such costs. Using theories on rural livelihoods (Ellis, 2000), we will also quantify the livelihood strategies designed by people of different ethnicity, gender, wealth group and geographic location to cope with the direct and indirect costs of the conflict.

Ghana specific context

Conflicts between farmers and herders, most of whom are of Fulani ethnicity, are frequent in Ghana and the West African sub-region. Herders began migrating, temporarily or permanently, into the northern parts of present-day Ghana from Burkina Faso, Mali and Niger at the beginning of the 20th century. This migration greatly intensified during and after the drought years in the Sahel in the 1970s and 1980s. From around 2000, herders have started migrating further south in Ghana to areas with higher precipitation (Olaniyan *et al.*, 2015). This move is also made possible by vaccines against tsetse flies which have pushed the frontier of cattle rearing further south towards the forest zone (Olaniyan *et al.*, 2015). Contemporary conflicts between farmers and herders are thus both taking place in the three traditional northern regions of Ghana as well as further south in the Brong Ahafo, Ashanti and Eastern Regions of Ghana (Olaniyan *et al.*, 2015; Soeters *et al.*, 2017; Tonah, 2006). Due to the frequent and often violent clashes, the issue has attracted both research and media attention. Research in Ghana has often portrayed the conflict as a simple dichotomy between farmers and herders. However, this is a gross simplification because both farmers and herders constitute very heterogeneous groups with important intra-group differences (Tonah, 2005, 2006). Moreover, the pastoralists and farmers are enmeshed in

local social and economic relations, and they share common cause over issues of poverty, marginalization, and abuse by local elites (Olaniyan *et al.*, 2015: 55). Importantly, all herders, in addition to their own cattle, take care of cattle owned by local farmers and political and economic elites (Olaniyan *et al.*, 2015; Tonah, 2006). The actors in the conflict use conflicting narratives to legitimize their claims. The herdsman, usually tagged as alien Fulani, base their access claims on an ECOWAS² protocol that permits free movement of people and animals (Olaniyan *et al.*, 2015). On the other hand, the farmers base their land access claims on notions of indigeneity and call for the expulsion of nomadic herdsman from their communities (Olaniyan *et al.*, 2015; Tonah, 2002). The Government has attempted a policy of expulsion of Fulani herders at various points in time using security forces and feeding on a discourse of "strangeness". This has, however, proved ineffective (Olaniyan *et al.*, 2015). The conflict challenges the legitimacy of the state: some farmers demand security and expulsion of the Fulani herders from the area, but this violates constitutional rights of Fulani herders; some of whom are born in Ghana and hence are recognized as Ghanaian citizens. Moreover, state actors are deeply involved through the political elite's own cattle-keeping practices (Olaniyan *et al.*, 2015).

Investigated aspects of the conflict in Ghana include work on factors that trigger the conflict such as stereotypes, prejudices and exclusion on one hand (e.g. Bukari and Schareika, 2015) and expulsions, survival and challenges to integration on the other hand (Depalo, 2007; Oppong, 2002; Tonah, 2002;). Abubakari and Longi (2014) attribute the violence between pastoralists and crop farmers in Northern Ghana to the pastoralists' socialisation processes and as part of the exigencies of their profession. Studies have also shown that rural livelihoods in Ghana are affected by the conflict; and that the nature of relations between farmers and herders are crucial in shaping livelihood strategies (Tonah, 2006). Missing from these studies is the question of how the conflict is influencing state building which is crucial for stability and democracy in West Africa.

RELEVANCE

The conflict between herders and farmers directly militates against the achievement of several Sustainable Development Goals: SDG 1 on Poverty (including the target on rights to resources and land access); SDG 8 on Decent work and Economic Growth (including the target on sustaining per capita economic growth); and SDG 16 on peace and justice (including the targets on reducing all forms of violence and related deaths, develop effective, accountable and transparent institutions at all levels, and contribute to the development of non-discriminatory laws and policies for sustainable development). Region-wise, the conflict constitutes a set-back to the achievement of the 'Comprehensive Africa Agricultural Development Programme' of the African Union's Agenda 2063, and the regional integration, peace and security agenda of ECOWAS. The proposed study has relevance for Ghana Government's development priorities on peace and security, food security, private sector development and regional integration as captured in thematic areas 1 (Ensuring and sustaining macroeconomic stability) and 3 (Accelerated agricultural modernisation and natural resource management) of the Ghana Shared Growth and Development Agenda II. AAN also has relevance for the Danish Government's priorities in Ghana: it is relevant for Denmark's strategy for development cooperation and humanitarian action on the promotion of peace and security. The Denmark-Ghana Partnership Policy 2014-2018 also highlights the importance of maintaining peace and stability in Ghana, a country which is otherwise located in a conflict-ridden region. By studying livestock and agricultural sectors, AAN contributes to promoting green growth, another priority for Denmark's partnership with Ghana.

² ECOWAS: [Economic Community of West African States](#)

OBJECTIVES

Developmental objective

To contribute to the building of well-functioning and legitimate institutions for peace, stability and wellbeing in Ghana.

Specific objectives

SO1 (Research objective): The processes of frontier and territoriality in the formation and erosion of access and authority and the livelihood consequences of farmer-herder conflicts analysed.

SO2 (Capacity building objective): Enhanced capacity for research, dissemination and teaching on access, authority, conflict and livelihood.

SO3 (Dissemination objective): Project findings disseminated and discussed within the scientific community and at the local community, district and national levels for policy impact.

EXPECTED OUTCOMES AND OUTPUTS

The project will deliver outputs in the form of: (a) three PhD graduates; (b) two post-docs; (c) one international PhD course on frontiers and territorialisation (d) 12 manuscripts for peer-reviewed journals; (e) one panel on farmer-herder conflicts organised in a major international research conference; (f) case description/documentation to be used in MSc learning activities at the Ghanaian and Danish universities; (g) eight MSc/MPhil theses; (h) ten stakeholder forum meetings (district level); (i) two national level forum meetings; (j) three policy briefs; (k) a video documentary on farmer-herder conflicts; (l) one national science and policy workshop at the end of the project. These outputs, in particular h-l, will inform policy discussion/formulation at national and local levels, which may contribute towards the management of, and solutions to, the farmer-herder conflicts in Ghana. Enhanced research and educational capacities (outputs a-g) will ensure that knowledge gains are retained and used after project completion.

METHODOLOGY

AAN will work at two research sites: Agogo area (Asante Akyem North District) and Afram Plains (Kwahu Afram Plains North District). The sites are approximately 75 km and 242 km respectively away from Kumasi, the Ashanti Regional capital. The two study areas were selected on the basis of the following criteria: (i) they both offer rich cases (Patton, 2002) with long histories and prevalence of farmer-herder conflicts; (ii) they have different land tenure histories and land use dynamics (farmers are mostly indigenes in Agogo but migrants in Afram Plains and thus carry different identities); (iii) there is also higher pressure on land in Agogo. These factors allow comparisons of differences and similarities, which may give indications on the robustness of our findings and the extent to which the findings may have validity beyond the study sites. The central part of our field investigations will be conducted by three PhD students and two postdocs, co-supervised by research team members from the partner universities. The work consists of an inception phase and three subsequent work packages. AAN will seek prior and informed consent from all people interviewed or engaged in the research process, and wherever relevant, the anonymity of respondents will be assured. No ethical or other type of research permit is required to carry out the research.

Inception phase

The inception phase brings the full research team (seniors, post-docs and PhD students from Ghana and Denmark) together for a two-week period. This phase of the research is inspired by the ECRIS (Rapid Collective Inquiry for the Identification of Conflicts and Strategic Groups)

procedure by Bierschenk and de Sardan (1997). It will include a short preparatory seminar in which the methodology and description of the study sites will be reviewed, followed by collective field inquiry. During this phase, researchers will divide into several groups, each focusing on one single local strategic group (e.g. migrant farmers, local/non-migrant farmers, plantation owners, sedentary herders, nomadic herders) for two days in each site. This inception phase will be concluded by a collective evaluation seminar in which the main topics, methods, and hypotheses for the following phases of field work will be discussed and described. In addition to setting the priorities and guiding the subsequent research, the joint fieldwork and discussion will make the research team get to know each other in a field setting.

Work Package 1: Conflicts and livelihoods

Central research question: How do farmer-herder conflicts impact livelihoods, income and labour allocation?

Key elements of WP 1: Quantitative assessment of conflict-associated livelihood changes through a large-scale survey at the two sites; 2) Deeper (qualitative) understanding of livelihood changes through life-story interviews, key informant interviews, and participant observation.

We will do a survey on income (Angelsen et al., 2012) and labour allocation using the time-allocation method (Grandin, 1983) in two points in time (i.e. total income in the past 12 months, and total yearly income in 2015) to allow quantitative identification of conflict-associated livelihood changes and their associated impact on household income. This will be done by randomly selecting households (n~150 farmers and 150 herders at each site). Collection of geographical coordinates for each household will allow for a geographical analysis of conflict impact intensity on the ground and the identification of conflict hotspots and their characteristics.

Quantitative data will be combined with qualitative data elicited through participant observation and participatory workshops followed by key informant interviews with farmers and herders (women and men) in order to get a more nuanced understanding of the impact of the conflict on people's livelihoods (e.g., food security, human security, social capital including trust in the study sites, general life satisfaction of local households). To unravel livelihood trajectories (de Haan and Zoomers, 2005), extensive narrative life-history interviews will be conducted with five farmers and five herders at each site (20 life-history interviews in total, ensuring an equal representation of women and men in the sample), allowing a fine-grained understanding of the challenges that people in the conflict areas face and how they change their livelihoods accordingly.

The above methodology will be carried out both at the Agogo and Afram Plains study sites by one PhD student and one post-doc researcher working closely together. A postdoc will be the main responsible party for the survey design and the PhD student will be the main responsible party for the quantitative data collection and life-history interviews. Two MPhil students will support the quantitative data collection and analysis.

Work Package 2: Conflicts and state-building

Central research question: How are farmer-herder conflicts reinterpreting access to land and other natural resources, and how does such territorialisation influence the authority of various politico-legal institutions?

Key elements of WP 2: Portfolio of access, mechanisms of access and related dynamics in space and time investigated through access mapping with the use of semi-structured interviews, participant observation, life-story interviews, archive and document analysis; 2) Dynamics and

struggles over authority and legitimacy of politico-legal institutions investigated through key informant interviews and document analysis.

The WP will make extensive use of the Theory of Access; access is defined as the ability to benefit from 'things' and is determined by a host of mechanisms (bundle of powers), including both rights-based mechanisms (statutory, customary and norms) as well as structural and relational mechanisms such as capital, technology and social relationships (Ribot and Peluso, 2003). We will study what farmers and herders have access to and how they gain, maintain and control their access. We will also study what claims are made and how farmers and herders legitimise such claims. The main methods will be semi-structured interviews, participant observation and life-history interviews with respondents of different ethnicity, gender, class, age, geographical location, and livelihood strategies. Data collection from farmers and herders will be complemented with key informant interviews with representatives of politico-legal institutions (paramount and divisional chiefs, district assemblies, central government agencies) and other organised interests (e.g. youth groups, farmer groups, herder groups) at the research sites on their roles in controlling access and sorting out and enforcing access claims. We will investigate changes in access in space and time through the methods described above, and will complement it with intensive archive and document study in order to cover the entire life span of the conflict at the study sites, its dynamics and impacts on the legitimacy and authority of politico-legal institutions. The results of the interviews with farmers and herders will be used to construct a survey which will be used to quantify the relative importance of different types of access mechanisms and analyse how those vary across land users of different ethnicity, gender, wealth group, age, geographical location, and livelihood strategy. Those questions will be integrated into the survey on income and labour allocation (WP 1).

The methodology presented will be carried out both at the Agogo and Afram Plains study sites, with one PhD student being assigned to each study site. The two PhD students will work closely with one of the post-docs, who will thus participate in the above methods at both sites.

Work Package 3: Politics and policy of farmer-herder conflicts

Central research question: How are interests of actors and other stakeholders in farmer-herder conflicts organised and how do the interests influence policy making?

Key elements of WP 3: An enhanced understanding of government policies to cope with farmer-herder conflicts through discourse analysis based on documents and key-informant interviews.

This WP investigates the ramifications of the farmer-herder conflict at the national and local levels. It will investigate the various interests in the farmer-herder conflict, how they are organised, and their claims, narratives and justifications made for various policy interventions. It also involves identification and analysis of past and present policy interventions to address farmer-herder conflicts in Ghana and their influence on conflict dynamics. This includes analysis of how problems and issues are defined and constructed; how they are placed on political and policy agenda; how policy options emerge; how and why government and non-government agencies act or do not act; and what the effects of government policies are (Heidenheimer, 1990). The research approach will be primarily qualitative discourse analysis of power relations between actors and how these influence policy discourse and interventions on the farmer-herder conflicts (Arribas-Ayllon and Walkerdine, 2008). The research methods will include analysis of policy documents, the coverage of farmer-herder conflicts in public and social media (newspapers, television, radio, Facebook, etc.), policy pronouncements and policy interventions. Moreover, it will involve key informant interviews with representatives from relevant ministries and agencies,

NGOs, interest groups, traditional authorities and political parties. It will also involve investigation of court cases pertaining to the conflict through document analysis and interviews with involved parties, judges and lawyers. The two postdoc researchers will be the main responsible party for the data collection and analysis, in collaboration with research team members from the partner universities.

OVERVIEW OF THE RESEARCH PLAN

The proposed timetable of AAN with milestones is shown in Table 2. AAN will be launched in July 2019, but the three PhD scholarships will be advertised early in 2019 to allow interviews and selection of PhD candidates to take place immediately after the launch. In 2019, the inception phase activities described above will also be carried out. In the first half of 2020, the PhD students will undertake their first stay in Denmark (4 months). During their stay, they will be visited in Denmark by their Ghanaian PhD supervisors. An international PhD course will be organised by AAN during this period.

Data collection instruments (quantitative and qualitative) will be developed by the post doc fellows from the end of 2019; this will require some field testing at the study sites. Data collection by the post doc fellows and seniors in WP3 will also commence in 2019. The main period of field work will be second half of 2020 and 2021. AAN will allow joint field work by PhD students, post doc fellows and senior researchers (PhD supervisors), ref. Table 1 below. A second stay of the PhD students in Denmark will take place in 2022 with focus on data analysis and drafting of manuscripts (4 months).

During 2023, focus will be mainly on dissemination; all project participants will take an active role in this through publications of research manuscripts and policy briefs, presentations at workshops and conferences as well as preparation and distribution of study materials and video documentary.

ORGANIZATION AND MANAGEMENT

The AAN team comprises various disciplines, gender and career levels (early, mid and senior) from Kwame Nkrumah University of Science and Technology (KNUST), University for Development Studies (UDS), University of Energy and Natural Resources (UENR) and University of Copenhagen (UCPH) (Table 1). Boateng Kyereh of the Faculty of Renewable Natural Resources, KNUST is the Project Coordinator (PC). All participating institutions have been actively involved in the preparation of the proposal which included a 5-day proposal workshop in Kumasi and a visit to a proposed field site in late July-early August 2018.

Organization: AAN consists of a Project Management Unit (PMU), a Scientific Advisory Committee (SAC) and three work packages. The PMU is made up of one member from each of the four partners and chaired by the project coordinator. The SAC will be a three-member scientific advisory committee consisting of renowned international scholars in relation to AAN research. The SAC will meet with the full research team in the second year in connection with the first stay of the PhD students in Copenhagen and the international PhD course, where the SAC members will also contribute. Each WP is led by a senior Ghanaian researcher and will have a Danish co-lead. The two share the responsibility for the WP deliverables and for coordination with the other WPs.

Table 1. Competences, main roles and time allocation of individual researchers

Institution	Researcher	Competences (Key words)	Man months			Number of field work days
			WP1	WP2	WP3	
KNUST	Boateng Kyereh	Natural resource management and governance; project management; natural resource conflicts	5 (Lead)	5	5	60
	Paul Osei-Tutu	Natural resource policy; institutional analysis; natural resource conflicts	5	5	5 (Lead)	85
	2 PhD students	Background in social sciences, human geography or natural resource governance	53 (Member)	53 (Member)		300
	Lawrence Kwabena Brobbey (Postdoc)	Rural livelihoods; institutions; resource access	18 (Member)		18 (Member)	120
	Frank Kwaku Agyei (Postdoc)	Resource access; authority; frontier and territorialization		18 (Member)	18 (Member)	120
UDS	Abdulai Abubakari	Land tenure; farmer-herder conflicts; rural sociology	5	5 (Lead)	5	117
	1 PhD student	Background in social sciences, human geography or natural resource governance		53 (Member)		150
UENR	Mercy Derkyi	Natural resource conflict transformation; gender; interactive governance	5	5 (Co-lead)		81
UCPH	Christian Hansen	Political ecology; access and exclusion; frontiers and territorialization	5	5 (Co-lead)	5	108
	Mariève Pouliot	Rural livelihoods; econometrics; resource policy	5 (Co-lead)	5	5	108
	Christian Lund	State building; frontiers and territorialization; natural resource conflicts		3	2 (Co-lead)	14

WP=Work package; Ghana Leaders are main PhD supervisors for PhDs within their WPs; Danish and Ghanaian Co-leaders are co-supervisors.

CAPACITY STRENGTHENING

The main capacity development component is the three Ghanaian PhD students and the two post-doc researchers. Two PhD students will be enrolled at KNUST and one at UDS (Table 1). All will have a Ghanaian principal supervisor and a Danish co-supervisor. The post-docs will also assist in PhD supervision. The PhDs will be “sandwich” with two stays in Copenhagen; a four-month stay early for literature review, supplementary course work and proposal writing and four months after field work for data analysis and manuscript writing. There will be visits of the Ghanaian supervisors during both first and second visit to Denmark.

The two post-doc researcher positions, each of three year duration, will offer two PhDs completed under the collaborative project, Access and Exclusion along the charcoal commodity chain in

Ghana (AX), the opportunity to pursue research within research areas they are already familiar and competent in, thereby further strengthening their research capacities, publication profiles and prepare them for, after the completion of the post-docs, employment as permanent teaching and research staff at KNUST. AAN is innovative in this regard since post-docs are not common in the Ghanaian university setting.

By offering opportunities for joint writing and enhanced international exposure, AAN will also strengthen the research capacity of the participating mid and senior researchers from Ghana and Denmark. Finally, AAN will provide grants (DKK 15,000 each) for eight MPhil students at the Ghanaian universities for data collection and thesis writing on AAN related topics.

PARTNERSHIPS

The international PhD course to be organised by AAN will allow the PhD students to nurture linkages with PhD students at other universities working on related issues. The panel on farmer-herder conflicts in Africa planned to be organised within the framework of the biennial international conference of the 'International Association for the Study of the Commons' will create exposure and nurture links with peers working on similar topics.

At a regional level, AAN will establish links with ongoing efforts by ECOWAS to address farmer-herder conflicts in the West African sub-region. In Ghana, the Central Government is presently employing eviction of herders from hotspot conflict areas and the establishment of ranches as strategies for addressing the conflict. AAN will feed into these government interventions by providing a systematic analysis of past interventions and the effects of the present interventions on conflict dynamics. ANN will also learn from and feed into other conflict interventions being spearheaded by such organisations as the Kofi Annan International Peacekeeping Training Centre, WANEP³ Ghana, and local governments at the project sites.

In Denmark, AAN will cooperate with the ERC 'Rule and Rupture' research project at UCPH Department of Food and Resource Economics, which examines the interplay of property, citizenship and political authority in legal pluralist contexts. This will include peer review of draft articles.

PUBLICATION AND DISSEMINATION STRATEGY

AAN employs a multifaceted approach to make its research findings available and beneficial to all stakeholders. The project will produce 12 peer-reviewed journal articles: nine from the three PhD studies and three from the Postdoc research by project year four. Findings from the project will be integrated into the curricular of masters and PhD courses at the Ghanaian and Danish universities. The project will organise an inception workshop that will involve 70 participants at the national level. It will also organise 10 district fora (one per year per project district) that will involve 40 participants each. There will be a mid-term national workshop that will involve 70 participants. There will also be a closing science and policy workshop that will provide the opportunity to share our findings and discuss uptake and upscale. AAN will produce a video documentary on farmer-herder conflicts to be shown on national television channels and the project website, and to be used in teaching at the partner institutions. AAN will produce three policy briefs that will be shared with the Government of Ghana (Ministries of Food and Agriculture, Interior and Defense), District Assemblies (local government) at the project sites and the ECOWAS Commission to feed into their ongoing efforts to address farmer-herder conflicts.

³ [WANEP](#): West Africa Network for Peacebuilding

Table 2. Overview of the research plan

PERIOD (Year) (Quarter)	2019		2020				2021				2022				2023				Indicator of achievement (Milestone)		
	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
SO1 (Research objective): The processes of frontier and territoriality in the formation and erosion of access and authority and the livelihood consequences of farmer-herder conflicts analyzed.	a b g	c d g	c d g	c d g	c d e f g	c d e f g	c d e f g	c d e f g	c d e f g	c d e f g	g	g	g	g							(a) Joint rapid field work to identify conflict hotspots and their characteristics; (b) Collective evaluation seminar to set the priorities for guiding subsequent research; (c) Quantitative assessment of conflict-associated livelihood changes; (d) Deeper (qualitative) understanding of livelihood changes; (e) Access mapping in time and space; (f) Investigation of dynamics and struggles over authority and legitimacy; (g) Discourse analysis of government policies to address farmer-herder conflicts.
SO2 (Capacity building objective): Enhanced capacity for research, dissemination and teaching on access, authority, conflict and livelihoods.	a b c e	d e	f	f g	h i				j	j	j	j	k	k	l	m					(a) PhD scholarships announced; (b) Interviews held; (c) Contracts signed; (d) Postdoc research plans approved; (e) PhD courses at KNUST; (f) 1 st DK stay of PhD students - courses at UCPH passed; (g) international PhD course (h) PhD research plans approved; (i) Comprehensive PhD exams at KNUST; (j) 3 Postdoc research manuscripts prepared/published (k) 2 nd DK stay – 3 manuscripts per student drafted and approved; (l) PhD theses handed in; (m) PhD defences and degrees awarded.
SO3: Dissemination objective: Project findings disseminated and discussed within the scientific community and at the community, district and national levels for policy impact.	a			b			b		e	b	c e h	e	b e h	e	e g	e g	b e f g i	d h			(a) Project inception workshop; (b) District workshops; (c) Mid-term national workshop; (d) Closing science and policy workshop; (e) 12 manuscripts submitted to peer reviewed journals; (f) One conference panel on farmer-herder conflicts; (g) Case documentation for MSc learning (h) three policy briefs; (i) Video documentary on farmer-herder conflicts.

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