## Appendix 1

Table A1.1 Studies included in the systematic literature review.

| Country | Study  | Method  | Main focus of interviews  | Area of origin   | Destination area                                      | Migration<br>data based<br>on the year | Ethnic<br>group of<br>migrants | Migration type   |
|---------|--|---|---|--|---|--|--------------------------------|--|
| Ghana   | Adamtey et al. 2015                                  | Survey (699 respondents)  | reasons for migration, socio-economic well being  | Yendi Municipality   | Agbogbloshie (Accra)                                  | not specified                          | Dagomba,<br>Konkomba           | rural to urban,<br>internal, long-<br>term                                 |
|         | Adjei-Nsiah et al. 2004                              | Survey (40 & 38 respondents), focus group discussion                          | soil fertility and land tenure issues   | Upper West Region  | Asuoano   | not specified                          | Lobis,<br>Walas and<br>Dagabas | rural to rural,<br>internal,<br>permanent,<br>annual                       |
|         | Aniah et al.<br>2019                                 | Survey (150 respondents), focus group discussion, key informant interviews    | adaptation strategies to climate variability  | Bongo District<br>(Gowrie Kunkua<br>and Soe Kabre)                           | southern Ghana<br>(Tamale, Kumasi,<br>Accra Kintampo) | not specified                          | not<br>specified               | rural to rural,<br>rural to urban,<br>internal,<br>seasonal                |
|         | Antwi-Agyei<br>and<br>Nyantakyi-<br>Frimpong<br>2021 | Survey (555 respondents),<br>stakeholder workshops,<br>focus group discussion | socio-demographic<br>characteristics, perceptions<br>of climate change, access<br>to climate information<br>services, coping practices, | Bawku West<br>District, Kassena<br>Nankana<br>Municipal, Talensi<br>District | southern Ghana  | not specified                          | not<br>specified               | rural to rural,<br>rural to urban,<br>internal,<br>seasonal, long-<br>term |
|         | Antwi<br>Bosiakoh et al.<br>2014                     | Survey (96 respondents)   | migration perception and predisposition, migration impacts  | Nandom   | Accra   | not specified                          | not<br>specified               | rural to urban,<br>internal,<br>seasonal, long-<br>term                    |
|         | Braimoh<br>2004                                      | Survey (35 respondents), land use change analysis                             | socio-demographic<br>characteristics, reasons for<br>migration, farming<br>technology, farm size  | Tamale, Damongo,<br>Yendi  | Wuripe  | 1989 - 2001                            | not<br>specified               | rural to rural,<br>urban to rural,<br>internal,<br>seasonal                |

Table A1.1 (continued)

| Country | Study                                | Method   | Main focus of interviews  | Area of origin   | Destination area  | Migration<br>data based<br>on the year | Ethnic<br>group of<br>migrants | Migration type  |
|---------|--------------------------------------|--|---|--|---|--|--------------------------------|---|
|         | Codjoe et al.<br>2017                | Survey (350 respondents), focus group discussion                                     | socio-demographic<br>characteristics, experience<br>of sea flooding in the<br>household, migration status | Dangbe East<br>District (Anyakpor,<br>Ocanseykope, Ada-<br>Foah)   | Tema, Denu,<br>Akosombo, Afram<br>Plains, Atakpamé,<br>international: Togo,<br>Nigeria, Cameroon                              | not specified                          | not<br>specified               | rural to urban,<br>internal,<br>international,<br>long-term                           |
|         | Goldbach<br>2017                     | Survey (190 respondents)   | socio-demographic<br>characteristics, reasons for<br>migration, migration<br>intentions                   | Keta   | Accra, Ho, Lomé   | not specified                          | not<br>specified               | rural to urban,<br>internal,<br>international,<br>long-term                           |
|         | Marquette et al. 2002                | Survey (120 respondents), focus group discussion                                     | socio-demographic<br>characteristics, fishing<br>activity, fishery-related<br>migration                   | Moree  | Western Region,<br>Central Region,<br>Côte d'Ivore<br>(Sassandra), Benin  | 1990s                                  | Fante                          | rural to rural,<br>internal,<br>international,<br>seasonal, long-<br>term, short-term |
|         | Owusu-Ansah<br>and Addai<br>2014     | Survey (100 respondents)   | socio-demographic<br>characteristics, place of<br>origin, motives for<br>migration, length of stay        | Regions: Upper<br>East, Ashanti,<br>Brong Ahafo,<br>Upper West,<br>Greater Accra,<br>Western, Volta,<br>Northern | Kumasi  | 2004-2014                              | Frafra and others              | rural to urban,<br>internal, long-<br>term, short-term<br>(transit)                   |
|         | Rademacher-<br>Schulz et al.<br>2014 | Survey (158 respondents),<br>participatory rural<br>approaches, expert<br>interviews | perception of rainfall<br>variability, coping strategy<br>to food insecurity                              | Nadowli District<br>(Zupiri, Takpo,<br>Mantari and<br>Nanville)  | Kumasi, Techiman,<br>Tamale, Accra,<br>Sekondi Takoradi,<br>Afram Plains,<br>Bolgatanga, Wa,<br>Côte d'Ivore,<br>Burkina Faso | 2011                                   | not<br>specified               | rural to rural,<br>rural to urban,<br>internal,<br>international<br>seasonal          |

Table A1.1 (continued)

| Country         | Study                  | Method   | Main focus of interviews   | Area of origin   | Destination area   | Migration<br>data based<br>on the year  | Ethnic<br>group of<br>migrants                                    | Migration type  |
|-----------------|------------------------|--|--|--|--|---|---|---|
|                 | Sward 2017a            | Survey (60 respondents)                          | tenure norms and land use practices                              | Northern Region  | Pru District   | not specified   | Gonja,<br>Konkomba,<br>Dagomba,<br>Mamprusi,<br>Chokossi          | rural to rural,<br>internal, long-<br>term                  |
|                 | Sward 2017b            | Survey (27 respondents), focus group discussion  | tenure norms and land use practices                              | Upper East Region  | Nkoranza South   | after 1983<br>(- 2014)  | Grusi,<br>Frafra,<br>Kusasi,<br>Dagaba                            | rural to rural,<br>internal, long-<br>term                  |
|                 | Tufuor & Sato 2017     | Survey (230 respondents), focus group discussion | circumstances of migrant<br>women, motivations for<br>migration  | Tamale Metropolitan District, Savelugu- Nanton District, Tolon-Kumbungu District | Accra  | not specified   | Dagomba   | rural to urban,<br>internal, short-<br>term, long-term      |
|                 | van der Geest<br>2011  | Survey (203 respondents)                         | reasons for migration  | Nandom   | Wenchi   | 2000  | Dagara  | rural to rural,<br>internal, long-<br>term                  |
| Burkina<br>Faso | Barbier et al.<br>2009 | Survey (205 respondents), focus group discussion | farmers' perceptions of<br>climate variability and its<br>impact | Tougou   | southern part of<br>Burkina Faso and<br>Côte d'Ivoire        | 2004 / 2006,<br>after the<br>drought and<br>1970s/80s<br>after the<br>drought | Fulani and<br>Mossi   | rural to rural,<br>internal,<br>international,<br>permanent |
|                 | Hampshire 2002         | Survey (8834 respondents)                        | types of migration,<br>migration motivation                      | Oudalan<br>and Séno  | Abidjan (Côte<br>d'Ivore),<br>Ouagadougou,<br>Bobo-Dioulasso | 1994-1995   | Fulani (and<br>subgroups<br>e.g. FulBe<br>DjelgoBe,<br>RiimaaiBe) | rural to urban,<br>internal,<br>international,<br>seasonal  |

Table A1.1 (continued)

| Country | Study                   | Method  | Main focus of interviews   | Area of origin  | Destination area  | Migration<br>data based<br>on the year  | Ethnic<br>group of<br>migrants | Migration type  |
|---------|-------------------------|---|--|---|---|---|--------------------------------|---|
|         | Jahel et al.<br>2018    | Survey (50 respondents),<br>land use change analysis,<br>population projections | development of farming<br>and expansion strategy,<br>annual development of the<br>plot structure                           | Northern Burkina<br>Faso, Côte d'Ivoire                   | Tuy Province  | 1970s and<br>80s (from<br>Mossi<br>Plateau),<br>2002-2010<br>from Côte<br>d'Ivore | not<br>specified               | rural to rural,<br>internal,<br>international,<br>permanent |
|         | West and<br>Nébié 2019a | Survey (20 respondents), land use change analysis                               | land-use/land-cover change<br>(LULCC) trends, changes<br>in rainfall, land tenure,<br>land-use practices, and<br>migration | Bam   | Côte d'Ivoire,<br>Ghana, southern<br>regions of Burkina<br>Faso | main out-<br>migration<br>wave<br>between<br>1975 -1996                           | Mossi                          | rural to rural,<br>internal,<br>international,<br>long-term |
|         | West and<br>Nébié 2019b | Survey (20 respondents), land use change analysis                               | LULCC trends, changes in<br>rainfall, land tenure, land-<br>use practices, and<br>migration                                | Northern parts of<br>Burkina Faso                         | Sissili   | main out-<br>migration<br>wave<br>between<br>1975 -1996                           | Mossi,<br>FulBe                | rural to rural,<br>internal, long-<br>term                  |
|         | Ouedraogo et al. 2009   | Survey (175 respondents), land use change analysis                              | income generating<br>activities from forest<br>exploitation or agriculture,<br>reasons for migration                       | Boulkiemdé,<br>Oubritenga,<br>Yatenga,<br>Sanmatenga, Bam | Neboun  | 1976 - 2007   | Mossi,<br>Fulani               | rural to rural,<br>internal,<br>long-term                   |
|         | Ruf et al. 2015         | Survey (60 respondents)   | migration patterns and motivations, cocoa planting   | Burkina Faso  | Bayota (Côte<br>d'Ivore)  | starting in<br>1970s  | not<br>specified               | rural to rural,<br>international,<br>long-term              |

Table A1.1 (continued)

| Country | Study                                  | Method                                      | Main focus of interviews   | Area of origin                                 | Destination area  | Migration<br>data based<br>on the year | Ethnic<br>group of<br>migrants | Migration type  |
|---------|--|---|--|--|---|--|--------------------------------|---|
| Nigeria | Ango et al.<br>2014                    | Survey (120 respondents)                    | socio-economic factors,<br>reasons for migration, type<br>of business engaged in,<br>perceived income  | Sokoto State<br>(Wamakko, Kware,<br>Bodinga)   | Kaduna State,<br>Kano State,<br>Zamfara State,<br>Niger State, Lagos<br>State, Sokoto City,<br>Abuja, Kebbi State | not specified                          | not<br>specified               | rural to urban,<br>internal,<br>temporary,<br>permanent                             |
|         | Dreier and<br>Sow 2015                 | Survey (36 respondents), expert interviews  | livelihood, their perception<br>of climate and<br>environmental<br>change and personal<br>migration experience   | Northwest Benin<br>(Dassari)                   | Nigeria (Saki,<br>Abeokuta, Adjuba),<br>Ghana, Central<br>Benin, Côte d'Ivore                                     | 2013                                   | Biabala                        | rural to rural,<br>internal,<br>international,<br>long-term, short-<br>term         |
|         | Kamta et al.<br>2020                   | Survey (204 respondents), expert interviews | time people spent in<br>conflict, gender,<br>occupation, income, land<br>ownership, access to water,<br>previous water scarcity,<br>previous migration | Guzamala, Gwoza,<br>Marte, Monguno,<br>Nganzei | Bakassi IDP Camp<br>in Maiduguri  | starting 2009                          | not<br>specified               | rural to urban<br>(refugee camp),<br>internal, type of<br>migration is not<br>clear |
|         | Olaniyan and<br>Okeke-<br>Uzodike 2015 | Survey (48 respondents)                     | relationship with<br>the local host communities;<br>and the causes of conflict;<br>perceived<br>consequences of the Fulani<br>grazers' arrival in Saki | Northern Nigeria                               | Saki  | 1960s, 1990s<br>onward                 | Fulani                         | rural to urban,<br>internal,<br>long-term   |