

Site selection Report for the Smallholder Pig Value Chain Development projects in Uganda

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Uganda Pig Value Chain

Site selection

In order to identify the potential districts to be targeted for the pig value chain assessment work in Uganda, geographical targeting using GIS characterisation was applied by utilising existing spatial data. Specifically, data overlays of pig population density, poverty levels and market access were used to depict differences in the districts and variations in the value chain domains¹ (Van de Steeg et al., 2012 – Uganda targeting report). Data on pig population density was derived from the 2008 livestock census report while the poverty levels, based on head count ratios were derived from the human population census data, gridded population maps and the national poverty lines (*ibid.*). Time taken to reach the nearest urban centre was used to proxy market access and served an important role in classifying the districts into different value chain domains (Annex 8.1). From the GIS characterisation 10 potential districts located in Central, Western and Eastern regions were identified as potential sites for the pig value chain assessment work as they met the GIS criteria (Annex 8.2).

The next step in the site selection process involved stakeholder consultations through a “site selection” workshop. The stakeholders included NALLIRI, NARO, local and international NGOs, Ministry of Planning, NAADS, District Local Government authorities, specifically the District Veterinary office of various districts, pig farmers and traders associations and representatives from various departments in the Faculty of Agriculture of Makerere and Gulu Universities. The objectives of the stakeholder consultation were to validate the site selection results from the GIS characterisation, to define “soft criteria” to be used in the final selection process and to propose a list of eligible districts that match the GIS and the “soft criteria”. The stakeholders identified four soft criteria to be included in the site selection process. These included potentials for partnerships especially with on-going complimentary projects, districts with high disease burden in pigs since this is a common factor that limit productivity, current input market linkages especially access to input service providers, Value chain in tandem with cultural beliefs, poor nutritional status of communities and geographical access of the area all year round.

The stakeholders identified more sites that were excluded from the GIS characterisation but fitted well with consideration of the “soft criteria”. They then scored the districts against the GIS and the “soft” criteria (Annex 8.3).

Districts with top scores were taken up by IFAD project for its pig value chain activities while the remaining sites that still fitted well in the GIS characterisation still remain as potential sites for the overall Livestock and Fish value chain work (Table 1). Although most districts in the western region fitted in the GIS characterisation criteria, they were not considered for the IFAD project work due to the short duration of the project and the need to consolidate activities and maximise on pilot interventions within a limited spatial coverage to facilitate learning before going full scale. From the stakeholder consultation 3 districts were identified for IFAD pig project work. These included Masaka, Kamuli and Mukono. Although some of these districts fell off from the GIS characterisation, they were considered as potential sites for IFAD project due to the strong existing partnerships and on-going pig value chain work that would complement the project efforts. Wakiso was also ranked highly but since its value chain typology is similar to that found in Mukono, the latter was selected as it also fitted within the GIS characterisation.

Districts in the western and northern regions were considered under Irish Aid after the end of IFAD project.

Table 1: Stakeholder site selection scores for pig value chain work in Uganda

¹ Value chain domains are classified based on location and purpose. Three such domains have been identified a priori for the pig systems and include rural production for rural consumption (rural-rural), rural production for urban consumption (rural-urban) and urban or peri-urban production for urban consumption (urban-urban).

District name	Fitness to the GIS criteria	Soft criteria				Total votes	Rank
		Partnership potential	Disease burden in pigs	Access to input/service providers	Geographical access		
Kumi	Yes	2	2	2	6	12	7
Tororo	Yes	4	2	1	2	9	9
Soroti	Yes	3	2	2	3	10	8
Kamuli	No – low pig density but high poverty levels	15	7	10	9	41	4
Lira	No – High poverty levels, lucrative neighboring markets	7	10	8	7	32	6
Gulu	No – High poverty levels, low pig density due to ASF	10	10	10	8	38	5
Wakiso	No - High pig density but low poverty levels	15	14	14	13	56	2
Mukono	Yes	15	9	14	9	47	3
Kayunga	Yes	0	4	1	1	6	10
Masaka	No - High pig density but low poverty levels	18	21	16	20	75	1

For western and northern Uganda districts under the Irish Aid project stakeholder site selection scores for pig value chain work was based on the following criteria.

Table 2: Stakeholder site selection scores for pig value chain work in western and northern Uganda

District	Access to complementary inputs	Poor nutrition status	Value chain in tandem with cultural beliefs	High pig disease burden	Partnerships	Votes	Rank based on region
Gulu (N)	19	5	10	5	8	47	2
Lira (N)	42	20	17	7	19	105	1
Pader (N)	0	1	0	1	0	2	3
Kasese (W)	8	12	8	11	4	43	3
Hoima (W)	30	6	12	5	7	60	2
Kibaale (W)	24	12	7	13	7	63	1
Kabarole (W)	0	0	0	0	0	0	4



Stakeholder consultation – site selection process

In order to identify locations within the selected districts where the pig value chain activities would be conducted, a further assessment of the pig population data at sub-county level using the livestock census data of 2008 was considered. For each district, 4-6 sub-counties with high pig population were selected for further scrutiny of the existing value chain domains. Consultations to identify the value chain domains within the sub-counties was done with partners on the ground especially the District Veterinary Officers, NAADS staff, local council leadership and local NGOs in each of the selected districts since some had more than one dominant domain. A minimum checklist was developed and administered to a few farmers and actors during site scoping studies to validate the value chain domains in each sub-county and also identify villages to be targeted for the value chain activities. For each district in the IFAD project, 2 sub-

counties were selected to represent each value chain domain type. Within each selected sub-county 2-3 villages were randomly selected for the pig value chain activities. A total of 35 villages were selected for the value chain assessment activities. Table 3 shows the selected sub-counties and the corresponding value chain domain types.

Table 3: Selected sub-counties and value chain domains

District	County	Sub-county /Division	Dominant value chain domain	No. of villages sampled
Masaka	Bukoto	Kkingo	Rural –rural	3
	Bukoto	Kyanamukaka	Rural-rural	3
	Bukoto	Kabonera	Rural-urban	3
	Masaka Municipality	Kimanya-Kyabakuza*	Urban-urban	2
	Masaka Municipality	Katwe-Butego*	Urban-urban	2
	Masaka Municipality	Nyendo-Ssenyange*	Urban-urban	2
Kamuli	Bugabula	Kitayunjwa	Rural-rural	2
	Bugabula	Namwendwa	Rural-rural	2
	Buzaaya	Bugulumbya**	Rural-rural	4
Mukono	Mukono	Mukono town council	Urban-urban	2
	Mukono	Goma	Urban–urban	2
	Mukono	Kyampisi	Rural-urban	4
	Mukono	Ntenjeru	Rural-rural	4
Hoima	Buhaguzi	Kiziranfumbi	Rural-rural	3
	Bugahya	Kitoba	Rural-urban	3
	Hoima	Busiisi	Urban-urban	3
Lira	Lira municipality	Ojwina	Urban-urban	2
	Lira Municipality	Adyel	Urban-urban	1
	Erute South	Adekokwok	Rural -urban	3
	Erute South	Barr	Rural-rural	3

Notes

*All three sub-counties of Masaka Municipality, largely representing a peri-urban-urban value chain, were selected for the pig value chain assessment as each represented a different type of production system and the levels of institutional involvement in the pig value chain varied greatly. For instance, in Katwe-Butego sub-county there are women groups involved in some form of collective pig production with NAADS offering extension support.

**The dominant value chain domain in all the selected sub-counties of Kamuli district is rural-rural. VEDCO, which is one of IFAD’s project partners in the district, is working in some of the parishes and villages in Bugulumbya sub-county on pig value chain activities. Therefore for Bugulumbya sub-county, 2 villages where VEDCO operates and another 2 where it does not were randomly selected for the pig value chain activities.

In the Irish Aid project, for each district one subcounty was selected to represent each value chain domain type. Three villages within each subcounty were selected considering areas where piggery was an important source of livelihoods of the farmers. A total of 18 villages (9 villages each for Hoima and Lira district) were selected for the value chain assessment activities. However, many villages in Lira district were not having the minimum number of pig farmers required for value chain assessment and these villages were merged.

A survey checklist for preselected villages was administered to key informants in the villages to assess existing pig market outlet types, destination of consumption, mortality/losses, services offered to farmers, farmer groups and associations in the villages visited, projects and or NGO's.

Table 4: Selected villages from site scoping in Hoima district

Subcounty/Division	Villages	Percentage (%) of households keeping pigs in the Village	Selection	Value chain domain types and Other comments
Busiisi	Buswekera*	54	✓	Typical urban - urban
	Kirisa	55	✓	Urban-urban but with rural pockets, keep other livestock
	Kitemba	68	✓	Urban-urban, piggery important
	Kasasa*	55	✓	Urban-urban, piggery important. About 50% HH headed by women
Kitoba	Bwendero	38	✓	Rural-urban, piggery important
	Bukerenge	29	X	Rural-urban but piggery contributes less to livelihood of HH
	Kibanjwa	36	✓	Rural-urban, poultry and piggery important
	Buhamba	34	✓	Rural-urban, piggery most important
Kiziranfumbi	Kidoma	68	✓	Rural-rural, piggery important
	Kikyaya	43	X	Rural-rural, piggery and other livestock important
	Kamusunsi	53	✓	Rural-rural, piggery and tobacco important
	Butimba	53	✓	Rural-rural, piggery important

*Villages which were merged into one

Table 5 Selected villages from site scoping in Lira District

Sub-county/Division	Village	% of households keeping pigs	Selection	Value chain domain types and Other comments
Ojwina & Adyel	Wigweng	4	X	Urban-urban value chain domain but the number of households keeping pigs were significantly very low
	Kichope	4	X	Urban-urban value chain domain but the number of households keeping pigs were significantly very low
	Onyapoyere	22	✓	•Urban-urban value chain domain. The Number of households currently keeping pigs per village was lower and the two villages were then merged to form one research cluster (Pseudo village)
	Ober entebbe	16		
	Ober Kampala	25	✓	•Urban-urban value chain domain.

	Starch Factory	18	✓	<ul style="list-style-type: none"> •Urban-urban value chain domain. The Number of households currently keeping pigs per village was lower and the two villages were then merged to form one research cluster (Pseudo village)
	Tetugu	6		
Adekokwo k	Telela	31	✓	<ul style="list-style-type: none"> •Rural-urban value chain domain. •The Number of households currently keeping pigs per village was lower and the three villages were then merged to form one research unit
	Okworokwo	30		
	Amokogee	31		
	Ojungu	33	✓	<ul style="list-style-type: none"> •Rural-urban value chain domain. •The Number of households currently keeping pigs per village was lower and the two villages were then merged to form one research unit
	Teobwolo	32		
	Araki	8	X	<ul style="list-style-type: none"> •Rural-rural value chain domain and the number of households keeping pigs were significantly very low
	Ocokcan	23	✓	<ul style="list-style-type: none"> •Rural – rural value chain domain. •The Number of households currently keeping pigs per village was lower and the two villages were then merged to form one research unit
Teobia	23			
Barr	Adaganwata	39	✓	<ul style="list-style-type: none"> •Rural-rural value chain domain. •Piggery is an important source of livelihoods •The Number of households currently keeping pigs per village was lower than the required minimum for the value chain assessment. •The three villages were then merged to form one research unit
	Alela	24		
	orem	25		
	Woromite	25	✓	<ul style="list-style-type: none"> •Rural-rural value chain domain, Piggery is important source of livelihoods •The three villages were then merged to form one research unit
	Atongokoo	38		
	Apikongo	48	✓	

Note: Generally the number of pig farmers in each of the villages in Lira District where low to be considered as separate research units. As a result, many of the villages were merged to constitute research unit with a fairly large number of pig farmer required for focussed group discussions.

Annexes

Spatial mappings of GIS variables

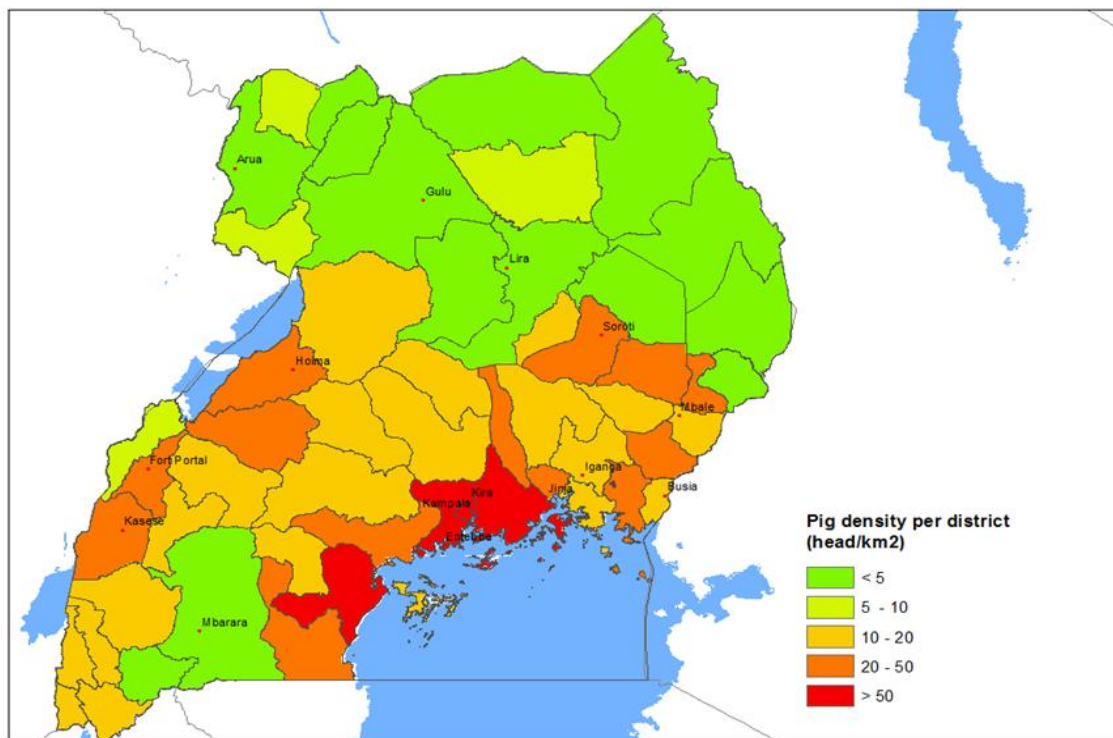


Figure 1: Pig population density in Uganda
 Source: Van de Steeg et al., 2012 – Uganda targeting report

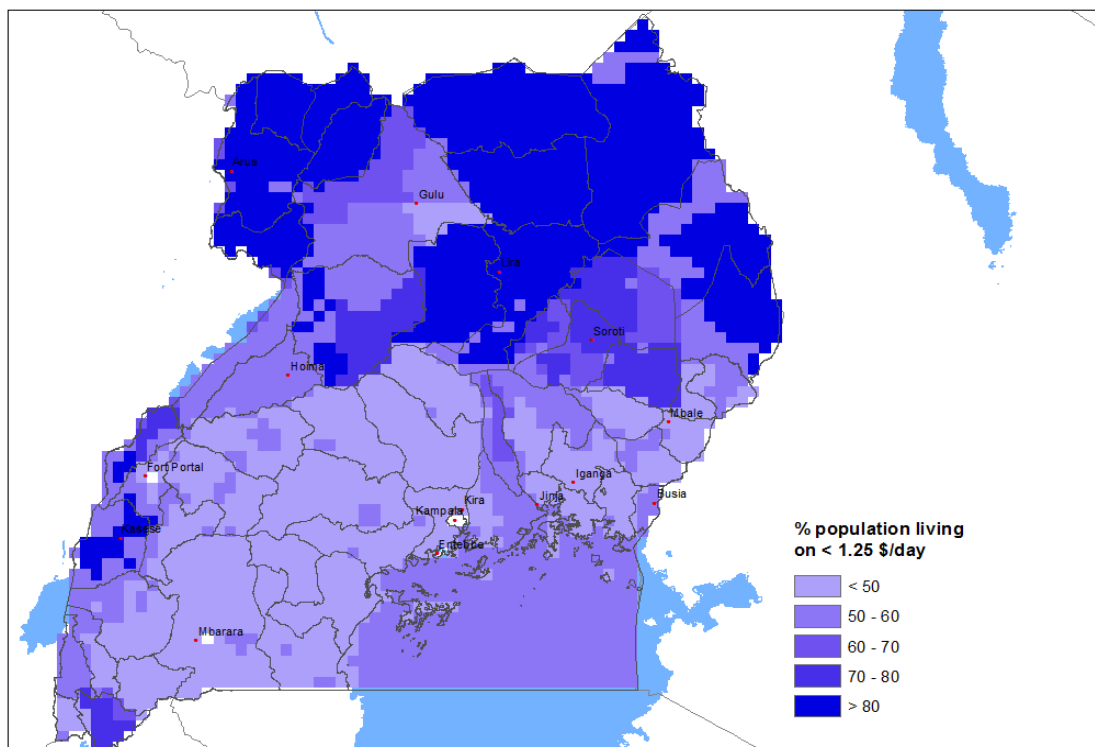


Figure 2: Poverty levels
 Source: Van de Steeg et al., 2012 – Uganda targeting report

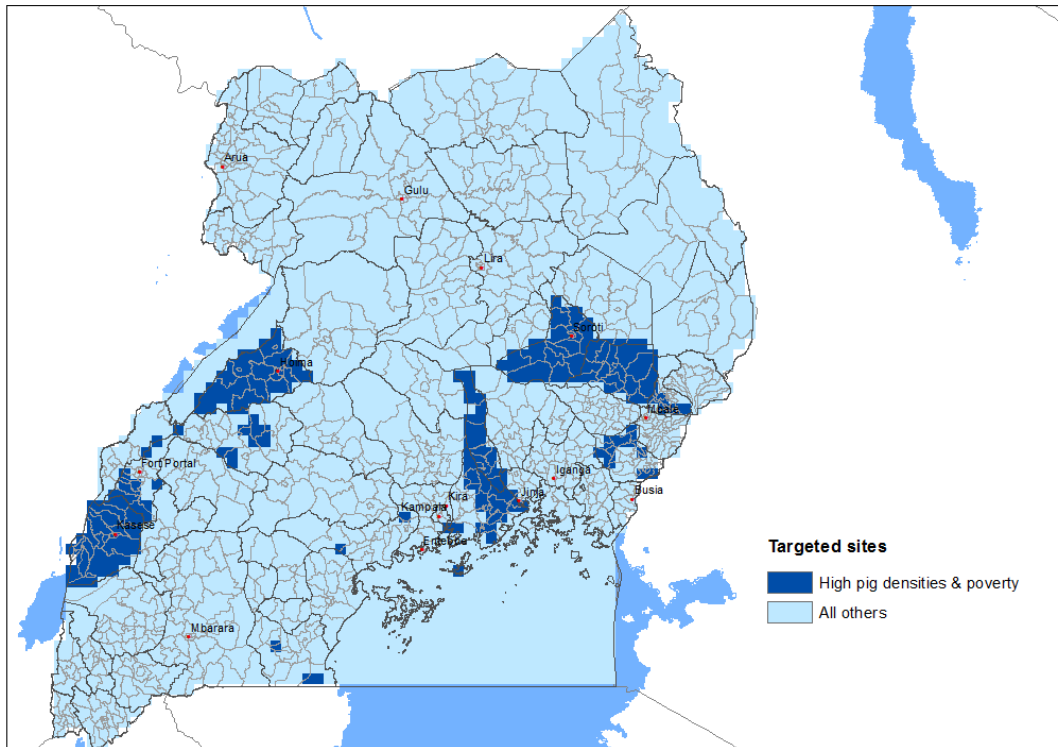


Figure 3: Potential sites for pig value chain assessments based on GIS characterisation
 Source: Van de Steeg et al., 2012 – Uganda targeting report

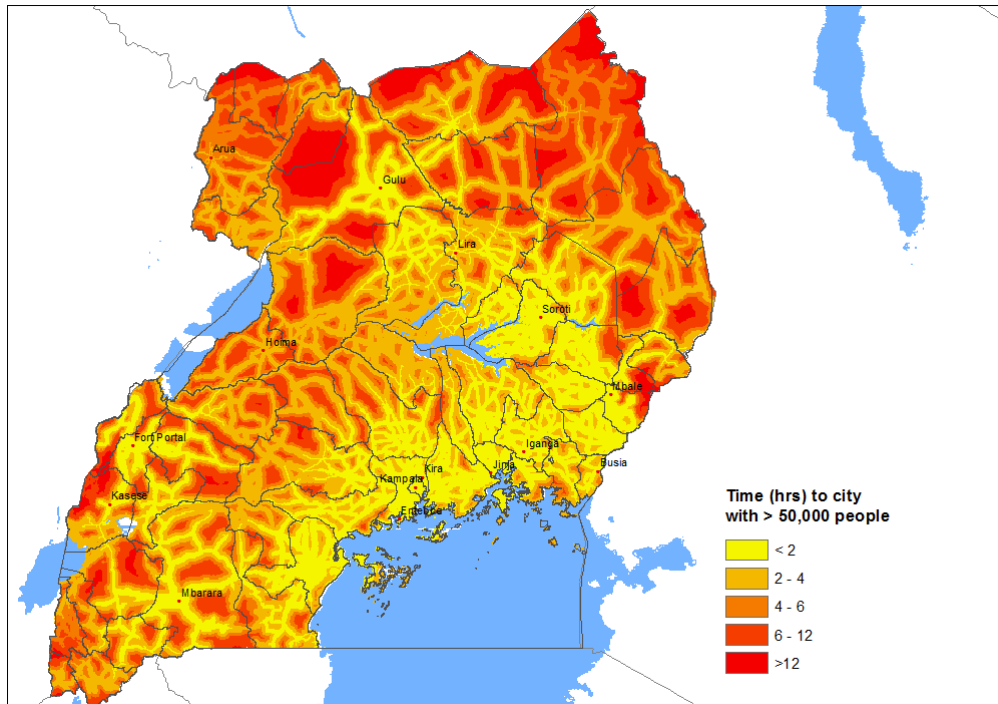


Figure 4: Market access
 Source: Van de Steeg et al., 2012 – Uganda targeting report

Potential districts for pig value chain assessments based on GIS characterisation

District	Region	Value chain domain
Kayunga	Central	Rural-urban
Mukono	Central	Rural-urban/Urban-urban
Bukedea	Eastern	Rural-Rural/ Rural-Urban
Kumi	Eastern	Rural-Rural/ Rural-Urban
Soroti	Eastern	Rural-urban/Urban-urban
Tororo	Eastern	Rural-urban
Kasese	Western	Rural –rural/urban - urban
Hoima	Western	Rural-rural
Kibaale	Western	Rural-rural
Kabarole	Western	Urban-urban

Stakeholder participation in site selection process for pig value chain in Uganda



Figure 5: Site scoring exercise by stakeholders in Uganda