## **Appendix 4**

Questionnaire sheet for brucellosis in ovines survey in Khartoum

State, Sudan, 2012.
Date: Serial No
1- Governorate:
(i) Khartoum
(ii) Umdurman
(iii) Kkartoum North
2- Locality:
(i) Jebel Awlia
(ii) Umbeda
(iii) Karari
(iv) Bahri
(v) Sharq elneil
Personal data of the farm owner:  Name (farm owner): Address:  3- Occupation: (i) Famer (ii) trader (iii) government official (v) other (specify).  4- Education: (i) illiterate (ii) Khalwa (iii) primary (v) high secondary (vi
University (vii) postgraduate.  Herd data:  5- Type of the herd: (i) Pure (ii) mixed  6- Number of animals raised: (i) Cattle (ii) Goat(iii) Sheep  (iv) Camels
<b>Sheep:</b> 7- Breed source: (i) local market (ii) bred within the farm.

8- Age (i) $\leq$ 2 year (ii) 2 to 4 years (iii) $\geq$ 4 years
9- Do you vaccinate your animals against brucellosis? (i) Yes (ii) No
10- Do you have abortion cases in your farm? (i) Yes (ii) No
11- Do you know about brucellosis? (i) Yes (ii) No
Herd management data:
12- What type of breeding do you adopt?
(i) Natural insemination (ii) Artificial insemination.
13- How do you feed and water your animals?
<ul><li>(i) In separate containers</li><li>(ii) Common container.</li></ul>
14- What is the source of the green fodder you provide to your herd?
<ul><li>(i) Grazing land.</li><li>(ii) Cut it from the farm.</li><li>(iii) Buy it from other farm.</li><li>(iv) Buy it from market.</li></ul>
15- What is the source of water that you provide to your herd?
<ul><li>(i) Common canal.</li><li>(ii) Wells</li><li>(iii) Tap water</li></ul>