Animal genetic resources are crucial to the sustainable development of poultry production. However, a gradual and relentless depleting of available breeds is now rife at the global scale. Local chicken breeds contribute significantly to the world production of meat and eggs. Indigenous breeds represent 80% of the world poultry population. However, the majority of these breeds has not been recorded and studied (Besbes, 2009). About 40% of poultry breeds have an unknown risk status and considerable efforts are necessary to evaluate them (FAO, 2008) in order to preserve their genetic variability and to provide them with a higher status. Local chicken breeds contribute significantly to the world production of meat and eggs. Indigenous breeds represent 80% of the world poultry population. However, the majority of these breeds has not been recorded and studied (Besbes, 2009). About 40% of poultry breeds have an unknown risk status and considerable efforts are necessary to evaluate them (FAO, 2008). Backyard poultry farming plays an important role in poverty alleviation and in providing food security in developing countries. In some African and Asian countries, the local chicken breed is the sole source of animal protein to be found in the diet of rural dwellers. On top of being a source of income, the backyard chicken represents a form of holding in those areas. The management of animal genetic resources in general and poultry in particular requires the identification of the phenotypes, population sizes and geographical distribution, as well as the genetic diversity within and between breeds using molecular biology methods. Nevertheless, without understanding the breeding contexts within which this genetic diversity is found, no sustainable management strategy can be set up.

**RESULTS**

**A. Survey of households keeping backyard poultry**

- The livestock portfolio of poultry farmers is diversified in all three regions (Table 1). In Algeria, poultry farmers keep mostly sheep (86.7%). In the DRC and Vietnam, respectively 44.2% and 67.3% of poultry farmers keep pigs.
- In Algeria and DRC, women are in charge of poultry breeding in 81.5% and 42.9% of interviewed households whereas in Vietnam, all family members are involved in this activity in most cases (90.4%).
- In the DRC, they are mainly bought (45.5%) and shared (29.6%). In Algeria and Vietnam, they are obtained as gifts (40.0%) and through inheritance (15.6%) and in Vietnam it is more through inheritance (67.0%) and buying (25.0%).
- Motives of farmers for keeping backyard poultry are as follows: kitchen leftovers (97.8%, 88.5% and 94.2%), crops and their residuals (2.2%, 65.5% and 94.2%), manioc (10% of leaves and 10% of spuds), and theft, cited by 26% of the chicken farmers of the DRC.
- All farmers in Algeria and Vietnam and 77% in DRC provided supplementary feeding to their chickens as follows: kitchen leftovers (97.8%, 88.5% and 65.5%), crops and their residuals (2.2%, 65.5% and 94.2%). In the DRC, 10.4% of chicken breeders use a nutrition formula: 50% of corn, 30% of soya and 20% of manioc (10% of leaves and 10% of spuds), suggested by a locally active NGO, while 22.1% of farmers do not feed their chickens.
- The majority of backyard chicken keepers in Vietnam (84.6%) never provide water to the birds; only 20.8% of farmers being in that case in the DRC. In Algeria, all farmers provide water to the birds.
- Drinking water sources cited are the water tap (Algeria: 43.3%; Vietnam: 5.8%; DRC: 5.2%), the well (Algeria: 71.3%; Vietnam: 96.6%; DRC: 95.5%), streams, springs, fountains… (Algeria: 8.9%; Vietnam: 94.2%; DRC: 9.6%).
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**B. Morpho-biometric characterization**

**RESULTS**

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