

# Pig breeding information for Ugandan pig keepers



**MORE  
PORK**

## PIG BREEDS

Different pig breeds or cross-breeds perform differently in terms of disease resistance, feed use, litter size, growth rate and many other traits. Use the right breed or cross-breed for your pig enterprise.

The local (Ugandese) breed of pig can be found in various parts of the country. Whilst it has a smaller body size and slower growth than other breeds, it is hardy, has good disease tolerance and can cope with almost any feed. It gives fatty carcasses.

Various exotic (white) breeds of pigs are in Uganda, including the Large White, Landrace and Camborough. These have large litters, fast growing piglets and produce lean carcasses; but they require high amounts of good quality feed.

The crossbred of the local (Ugandese) pig breed and an exotic breed will have attributes of both breeds. Such crossbreds are good choices for rearing if you are not able to meet the feed and management needs of pure-bred exotics.

Photo: ILRI/Karen Marshall



Photo: ILRI/Karen Marshall



**ILRI**  
INTERNATIONAL  
LIVESTOCK RESEARCH  
INSTITUTE

**Contact: Karen Marshall**  
International Livestock Research Institute  
P.O Box 24384, Kampala, Uganda  
[k.marshall@cgiar.org](mailto:k.marshall@cgiar.org)

The **More Pork** project is led by the International Livestock Research Institute (ILRI) with funding from CGIAR Research Program on Livestock. The breeding component of More Pork is co-led by Makerere University (MU) and ILRI.



This document is licensed for use under the Creative Commons Attribution 4.0 International Licence. November 2020



RESEARCH  
PROGRAM ON  
Livestock

# Pig breeding information for Ugandan pig keepers



**MORE  
PORK**



Photo: ILRI/Karen Marshall

## PIG BREEDING

Select both good sows and boars as each of these contributes half the genetic quality of the piglets.

Breed sows with good reproductive performance (early age at first litter, short times between litters and good litter size at birth and weaning) to boars with good growth and carcass attributes (leanness), to produce many piglets that will grow fast and be lean.

Sows that are exotic (white) can be mated to boars of different breeds.

Sows that are local (Ugandese) breed can be mated to local (Ugandese) boar to create a local (Ugandese) piglet. Sows that are local breed can also be mated to crossed or pure breed boars without complication (but if natural mating ensure the boar is not too big for the sow).

Mating of pigs that are related, such as those from the same litter or mother and son, results in piglets that are inbred. Inbred gilts/sows will have smaller litter sizes with slow growing and weak piglets that tend to be prone to disease, and inbred boars may not be fertile. Only mate sows and boars that are not related.



MAKERERE UNIVERSITY

**ILRI**

INTERNATIONAL  
LIVESTOCK RESEARCH  
INSTITUTE

**Contact: Karen Marshall**  
International Livestock Research Institute  
P.O Box 24384, Kampala, Uganda  
[k.marshall@cgiar.org](mailto:k.marshall@cgiar.org)

The **More Pork** project is led by the International Livestock Research Institute (ILRI) with funding from CGIAR Research Program on Livestock. The breeding component of More Pork is co-led by Makerere University (MU) and ILRI.



This document is licensed for use under the Creative Commons Attribution 4.0 International Licence. November 2020



RESEARCH  
PROGRAM ON  
Livestock

# Pig breeding information for Ugandan pig keepers



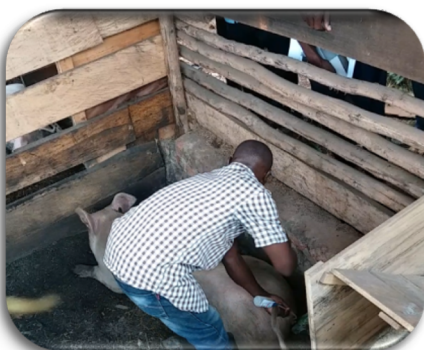
Photo: Makerere University/Donald Kugonza



Photo: ILRI/K. Dhanji



Photo: Makerere University/Donald Kugonza



## PIG ARTIFICIAL INSEMINATION

Artificial insemination is when semen from the boar is placed directly into the sow on heat to make her pregnant. An artificial inseminator is required to carry out this procedure.

Artificial insemination is used successfully by many pig farmers in Uganda. Pigs mated by artificial insemination have the same litter size as pigs that are naturally mated.

A key advantage of using artificial insemination over natural mating is that it prevents the spread of diseases as the sow does not need to contact the boar. Artificial insemination also provides a choice of boar breeds, so that you can select the best boar breed for your sow.

Artificial insemination will be most successful when the sow is well managed and well fed, when heat is properly detected, and when the artificial insemination service provider is informed as soon as heat is detected.

If you want to use artificial insemination, speak to your veterinary officer or artificial insemination service provider about what breed of boar is best for your sow and your pig raising system.

Artificial insemination service providers will always have an identity card and fill out a report on the insemination which is left with you.

To find artificial insemination service providers in your area, contact your district veterinary officer.



**ILRI**  
INTERNATIONAL  
LIVESTOCK RESEARCH  
INSTITUTE

*Pig Breeding Information for Uganda Pig Keepers: Pig artificial insemination, English*

**Contact: Karen Marshall**  
International Livestock Research Institute  
P.O Box 24384, Kampala, Uganda  
[k.marshall@cgiar.org](mailto:k.marshall@cgiar.org)

The **More Pork** project is led by the International Livestock Research Institute (ILRI) with funding from CGIAR Research Program on Livestock. The breeding component of More Pork is co-led by Makerere University (MU) and ILRI.



This document is licensed for use under the Creative Commons Attribution 4.0 International Licence. November 2020



RESEARCH  
PROGRAM ON  
Livestock



# Pig breeding information for Ugandan pig keepers



**MORE  
PORK**

## IDENTIFICATION OF GOOD BREEDING SOWS

If you need a replacement gilt from your piglets, keep the strongest, healthiest and fastest growing piglets born from a large litter. Be careful not to sell all your best piglets if you need a replacement gilt.

To select a breeding gilt from your piglets, keep the best 2–4 female piglets from weaning and then make the final selection of the gilt from these when they are about six months of age.

Newly introduced gilts should come from the best sows that are good mothers, have large litters with most piglets surviving to weaning, have good milk supply, have an age at first litter of 12 months, and a time period between litters of five months. Additionally, they should have at least 12 normal well aligned teats, have no defects such as hernia and must have good body conformation.

Gilts should be mated when they are seven to eight months of age and with a good weight at least 70% of maturity weight.

Sows that are bad mothers do not easily get pregnant, have small litters, low milk supply and lose many of their piglets before weaning. These should be sold for slaughter and not be used for breeding.



Photo: Kampala City Council  
Authority/E. Galukande



Photo: Makerere University/  
Donald Kugonza



**ILRI**  
INTERNATIONAL  
LIVESTOCK RESEARCH  
INSTITUTE

*Pig Breeding information for Uganda Pig Keepers: Identification of good breeding sows, English*

**Contact: Karen Marshall**  
International Livestock Research Institute  
P.O Box 24384, Kampala, Uganda  
[k.marshall@cgiar.org](mailto:k.marshall@cgiar.org)

The **More Pork** project is led by the International Livestock Research Institute (ILRI) with funding from CGIAR Research Program on Livestock. The breeding component of More Pork is co-led by Makerere University (MU) and ILRI.



This document is licensed for use under the Creative Commons Attribution 4.0 International Licence. November 2020



RESEARCH  
PROGRAM ON  
Livestock



# Pig breeding information for Ugandan pig keepers



## IDENTIFICATION OF GOOD BREEDING BOARS

Ensure that young boars selected as breeding animals have at least 12 normal well aligned teats, testes must be equal in size and be descended well. They should have no defects such as hernia and must have good body conformation.

Young boars should be mated when they are at least eight months of age and with a good weight at least 70% of maturity weight.

Boars that are not fertile or only partially fertile should be sold for slaughter and not used for breeding..

If using a communal/village boar, speak to other pig keepers in your area to find the best village boars. Good boars should be free from any diseases, readily get the sow pregnant, and produce many piglets that are fast-growing and strong.

Photo: Kampala City Council  
Authority/E. Galukande



Photo: Breeds Feeds and Meats  
Limited/P. Borei



**ILRI**  
INTERNATIONAL  
LIVESTOCK RESEARCH  
INSTITUTE

*Pig Breeding Information for Uganda Pig Keepers: Identification of good breeding boars, English*

**Contact: Karen Marshall**  
International Livestock Research Institute  
P.O Box 24384, Kampala, Uganda  
[k.marshall@cgiar.org](mailto:k.marshall@cgiar.org)

The **More Pork** project is led by the International Livestock Research Institute (ILRI) with funding from CGIAR Research Program on Livestock. The breeding component of More Pork is co-led by Makerere University (MU) and ILRI.



This document is licensed for use under the Creative Commons Attribution 4.0 International Licence. November 2020



RESEARCH  
PROGRAM ON  
Livestock

# Pig breeding information for Ugandan pig keepers



## WHERE TO ACCESS GOOD BREEDING SOWS AND BOARS

Many pigs in Uganda are crosses of different breeds. If you are looking to buy pigs of a specific breed, buy them from reputable breeders as most animals available from local markets or neighbours are of unknown breed or cross-breed type.

When buying a gilt or young boar, ask about its parents. Gilt or young boars should only be from the best sows mated to the best boars. If the person selling the gilt or young boar cannot provide information on the parents, look for another person to buy from.



Photo: Kampala City Council Authority/E. Galukande



Photo: ILRI/K. Dhanji



**ILRI**  
INTERNATIONAL  
LIVESTOCK RESEARCH  
INSTITUTE

*Pig Breeding Information for Uganda Pig Keepers: Where to access good breeding sows and boars, English*

**Contact: Karen Marshall**  
International Livestock Research Institute  
P.O Box 24384, Kampala, Uganda  
[k.marshall@cgiar.org](mailto:k.marshall@cgiar.org)

The **More Pork** project is led by the International Livestock Research Institute (ILRI) with funding from CGIAR Research Program on Livestock. The breeding component of More Pork is co-led by Makerere University (MU) and ILRI.



This document is licensed for use under the Creative Commons Attribution 4.0 International Licence. November 2020



RESEARCH  
PROGRAM ON  
Livestock

# Pig breeding information for Ugandan pig keepers



## PIG HEAT AND HEAT DETECTION

The heat period of a sow lasts 2–3 days. Best time to breed during the heat period for gilts is the first day of heat. For sows, the best day is the second day.

Signs of a gilt or sow being on heat and ready for mating are red and swollen vulva, slimy mucus discharge from vulva, tendency to mount or be mounted and standing still when pressed on the back.

If a sow does not come on heat, you can try using hormone treatment; but this should be done by trained personnel. The sow may need better feed.

The occurrence of heat after weaning piglets is between 2 and 10 days for well managed SOWS.

Gilts come to their first heat after reaching puberty. Puberty can be induced by spraying her pen with boar urine every morning for a week, housing gilts in groups, and if your farm has a boar, bring the gilt to the pen next to the boars pen so that she can see, hear and smell him.

Photo: Makerere University/  
Donald Kugonza

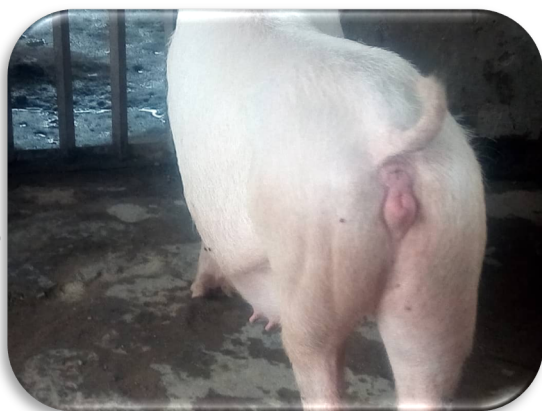


Photo: Makerere University/ Donald Kugonza



**ILRI**  
INTERNATIONAL  
LIVESTOCK RESEARCH  
INSTITUTE

*Pig Breeding Information for Uganda Pig Keepers: Pig heat and heat detection, English*



RESEARCH  
PROGRAM ON  
Livestock

**Contact: Karen Marshall**  
International Livestock Research Institute  
P.O Box 24384, Kampala, Uganda  
[k.marshall@cgiar.org](mailto:k.marshall@cgiar.org)

The **More Pork** project is led by the International Livestock Research Institute (ILRI) with funding from CGIAR Research Program on Livestock. The breeding component of More Pork is co-led by Makerere University (MU) and ILRI.



This document is licensed for use under the Creative Commons Attribution 4.0 International Licence. November 2020



# Pig breeding information for Ugandan pig keepers



Photo: ILRI/Karen Marshall



## PIG MATING

Gilts should be bred to the boar on the first day of heat, whilst sows should be bred to the boar on the second day of heat.

Be sure the boar is not too heavy to mate the sow.

If a boar is overworked (used for too many mating in a week) they might not make a sow pregnant, this is a problem for communal boars and commercial farms with many sows and a few or even one boar. A boar should not serve more than three times a week.

An overfed boar tends to have very poor sexual drive. Avoid feeding boars to obesity.



**ILRI**  
INTERNATIONAL  
LIVESTOCK RESEARCH  
INSTITUTE

**Contact: Karen Marshall**  
International Livestock Research Institute  
P.O Box 24384, Kampala, Uganda  
[k.marshall@cgiar.org](mailto:k.marshall@cgiar.org)

The **More Pork** project is led by the International Livestock Research Institute (ILRI) with funding from CGIAR Research Program on Livestock. The breeding component of More Pork is co-led by Makerere University (MU) and ILRI.



This document is licensed for use under the Creative Commons Attribution 4.0 International Licence. November 2020



RESEARCH  
PROGRAM ON  
Livestock

# Pig breeding information for Ugandan pig keepers



**MORE  
PORK**

## PIG PREGNANCY AND PREGNANCY DIAGNOSIS

If a sow does not become pregnant after mating, she will return to heat in about three weeks time. Look out for signs of heat starting 19 days after mating or artificial insemination.

Pregnancy tests can be performed by using an ultrasound scanner 18–35 days after mating. Contact the artificial insemination service provider for this service.

If heat signs are seen 2–15 days after service (mating or insemination), then the sow is not pregnant could have cystic ovaries and on repeat of these symptoms the sow may have to be culled.

If heat signs are seen 18–22 days after mating, then the sow either did not become pregnant or could have lost the pregnancy between 1–10 days.



Photo: ILRI/K. Dhanji



**ILRI**  
INTERNATIONAL  
LIVESTOCK RESEARCH  
INSTITUTE

*Pig Breeding Information for Uganda Pig Keepers: Pig pregnancy and pregnancy diagnosis, English*



RESEARCH  
PROGRAM ON  
Livestock

**Contact: Karen Marshall**  
International Livestock Research Institute  
P.O Box 24384, Kampala, Uganda  
[k.marshall@cgiar.org](mailto:k.marshall@cgiar.org)

The **More Pork** project is led by the International Livestock Research Institute (ILRI) with funding from CGIAR Research Program on Livestock. The breeding component of More Pork is co-led by Makerere University (MU) and ILRI.



This document is licensed for use under the Creative Commons Attribution 4.0 International Licence. November 2020

# Pig breeding information for Ugandan pig keepers



Photo: Kampala City Council  
Authority/E. Galukande



## IMPORTANCE OF USING DATA TO ASSIST IN FARM MANAGEMENT DECISION MAKING

Keeping records on your pigs will help you make good decisions on raising and selling your pigs.

Keeping records of financial transactions regarding your pig enterprise will enable you determine whether you are making a profit or loss.



Photo: ILRI/K. Dhanji



**ILRI**  
INTERNATIONAL  
LIVESTOCK RESEARCH  
INSTITUTE

*Pig Breeding Information for Uganda Pig Keepers: Importance of using data in farm management decision making, English*

**Contact: Karen Marshall**  
International Livestock Research Institute  
P.O Box 24384, Kampala, Uganda  
[k.marshall@cgiar.org](mailto:k.marshall@cgiar.org)

The **More Pork** project is led by the International Livestock Research Institute (ILRI) with funding from CGIAR Research Program on Livestock. The breeding component of More Pork is co-led by Makerere University (MU) and ILRI.



This document is licensed for use under the Creative Commons Attribution 4.0 International Licence. November 2020



RESEARCH  
PROGRAM ON  
Livestock