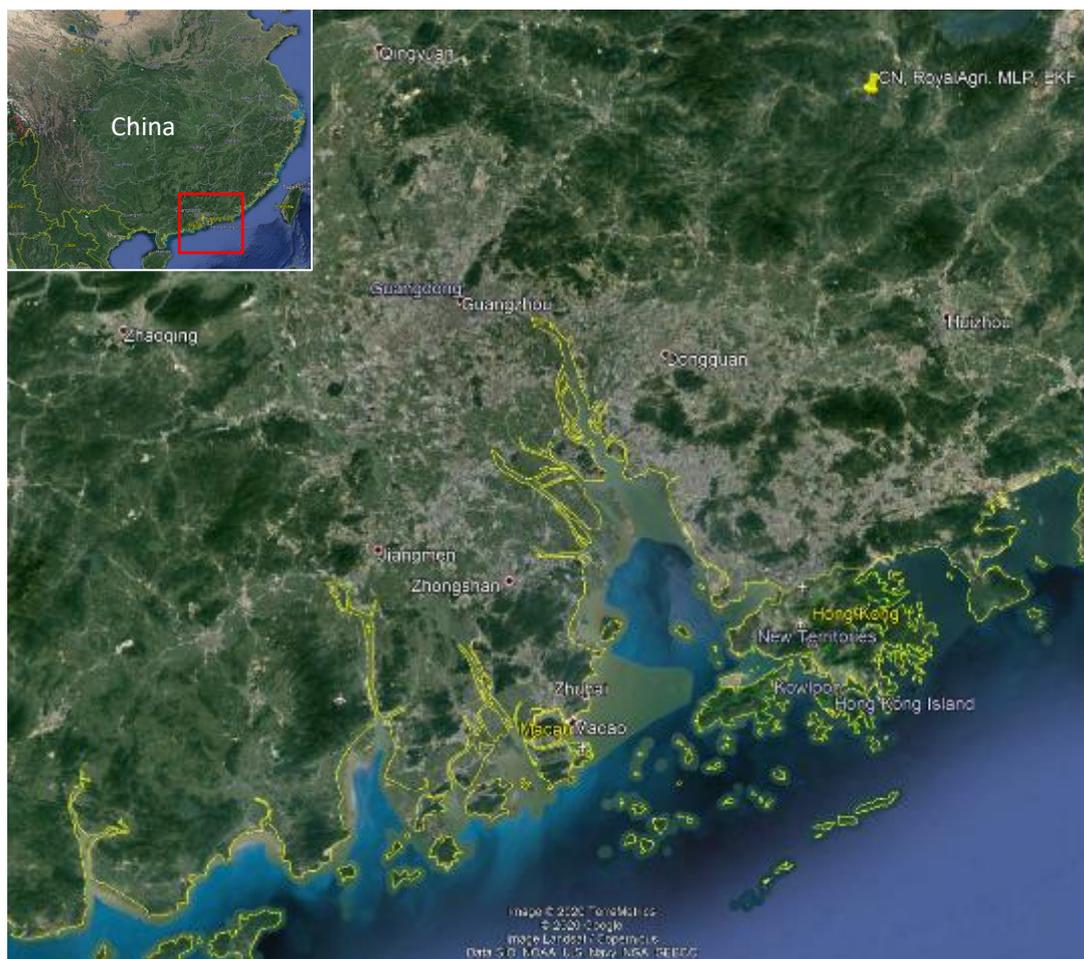


Guandong Hongfeng Pig Farm Project

Project Description

The Guandong Hongfeng Pig Farm project is located in Langbei Village, Longhua Town, Longmen County, South East China (see map). The area is characterised by steeply sloping hills. The project comprises the construction of a new 5 storey sow farm for production of 7 kg piglets and a 3 storey administration building. The project developer is Royal Agriculture Development Co. Ltd. (RAD).



The project is currently under construction. The farm is being built on the site of an existing farm by the same owner. The existing farm was built in 2011-12 and was substantially reduced in size in 2019 at the order of the authorities.

| Livestock Numbers | Sows | Stock/ housed pigs |
|-------------------|-------|--------------------|
| New sow farm | 5 200 | 62 000 |

All piglets from the new sow farm will be sold as 7 kg piglets to other pig farm in the area. These farm will raise the piglets from 7 kg to slaughter pigs at the weight of 105 kg or what the slaughterhouse demands.

The sow farm will make use of the following slurry management facilities from the existing pig farm:

- Slurry separators
- Biogas plant

- Dry fraction storage
- Wastewater treatment plant for liquid fraction

The treated effluent will be used for irrigation purposes on the 54 ha of woodland that the farm has contracted for this purpose.

The existing farm will stop all production when the new sow farm is commissioned. The production pigs will be slaughtered and the breeding sows and boars moved to the new sow unit. The existing farm will be disinfected and remain empty until construction starts on the new weaner and finisher units. The existing farm will be demolished to make way for the new weaner and finisher units.

Associated Facilities

The associated facilities are as follows:

- Weaner and fattening units on farm site, construction date unknown
- Slaughterhouse operated by RAD, 20 km distance, reconstruction is projected

Project Site

The project site is 33 ha, with an additional 53 ha for forestry, where the treated effluent is re-used for irrigation purposes. The site and the forest land are leased.

The site is located either side of a valley which is transected by a small stream (green in image below). This feeds into the Luxihe River to the north east of the site (blue in image below).



图 1.1-2 项目周边位置关系图

Process

The new sow farm will be based on modern and efficient intensive pig farming methods. Whereas the pig buildings at the existing farm were previously washed by flushing water to remove animal waste, the new buildings will be based on removal of pig manure by scraper without the addition of flushing water.

The animal waste is separated into solid and liquid fractions. It is estimated that the mechanical separators will separate 10 % of the animal waste as solid fraction. The solid fraction is stored on site and collected for use as a fertiliser by Longmen County Waste Resource Centre. The liquid fraction is

pumped to the on-site wastewater treatment plant where it is treated to irrigation standards. The treated effluent is not permitted to be discharged to the recipient and is used for irrigation purposes. A land area of 53 ha has been secured for this purpose, it is understood that eucalyptus trees will be grown.

Environmental Approvals

The project EIA was completed in May 2020 and approved by Huizhou Department of Ecology and Environment in July 2020. The EIA is based on a stock allocation of 35,000 pigs. In September 2020 Longmen County, Poultry and Livestock Breeding Office allocated the pig farm an additional stock of 27,000 pigs, bringing the total stock to 62,000. The EIA is now being updated to take into account the increased pig stock and changes in the project design, mainly that the number of weaner and finishing buildings will be increased to accommodate the increased number of finishers. The EIA will thereafter be submitted for approval.

Key Risks and Issues of Project

The following key risks and issues have been identified:

| | |
|-------------------------------------|---|
| Environmental and social management | The Project developer has previously been non-compliant on environmental management, with fines issued for exceeding the permitted number of pigs and for polluting the watercourse. It is therefore very important that there is a high standard of environmental and social management during the operations of the pig farm. |
| Biosecurity and animal welfare | The existing pig farm is outdated and dilapidated and poses a biosecurity threat. It cannot be reused to house weaners and finishers produced at the new sow farm. The layout of the existing farm means that it will not be feasible to erect the necessary fences for biosecurity. The existing pig farm will therefore be emptied when the new sow farm is completed. All weaners produced at the new farm will be sold until the new weaner and finisher buildings are constructed. |
| Slurry management | Standard practice is to spread the liquid fraction on agricultural land. Due to the steep slopes this is not possible and the liquid fraction must be treated to reduce the pollutant load prior to its use for irrigation. This means that some of the nutrients are lost and cannot be re-used. The treated liquid fraction will be disposed as irrigation water in woodland. The separated solid fraction will be used as fertilizer on agricultural land or horticultural land. |

Environmental and Social Framework

The project will be assessed for its compliance with EKF's CSR Policy and relevant international and national standards including but not limited to:

- IFC Performance Standards for Social and Environmental Sustainability (2012). Performance Standards 1 – 8.
- IFC EHS General Guidelines (April 2007)
- IFC EHS Guideline for Mammalian Livestock Production (April 2007)
- Relevant national environmental approvals and other approvals
- Animal Welfare Standards including 2008/120/EC of 18 December 2008 laying down minimum standards for the protection of pigs and 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes.