



Breakout Session 3A:

ATVET – A suitable model for enhancing the relevance of TVET in rural areas in ASEAN?

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Context

- There is a need to modernise and make TVET in rural areas more attractive in order to retain young people and to help rural communities have profitable income generating activities.
- In the past, TVET in agricultural sector has provided static skills training for agricultural systems that are disconnected from dynamic an growing sectors of economies and labour demands.



What is ATVET?

- ATVET is an educational process involving general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge related to occupations in agriculture (Jones, 2013).
- ATVET uses a value chain approach to cover a number of activities and occupations from production to processing and marketing.

What is ATVET?

- ATVET can be provided through different educational approaches, such as formal, non-formal and informal education, to reach diverse groups and to make the provision of skills innovative and up-to-date.



Areas related to ATVET

- Employment areas related to ATVET are vast, and include:
 - Agricultural production
 - Agro-processing
 - Agro-dealers
 - Buyers
 - Marketing
 - Transportation
 - Extension
 - Research
 - Lab technicians
 - Operation and maintenance of agricultural machinery

- Many of these occupations require analytical and entrepreneurial skills in addition to technical skills.
- It is important to have a good understanding of the needs of the labour market. In the absence of reliable, labour market information, other tools can be used.

Exercise

- In groups, please discuss what are the potential advantages and disadvantages of ATVET.
- Do this through a SWOT analysis.



SWOT Analysis



Potential results of SWOT analysis

- **Strengths:** Responsiveness to demand, accessibility to diverse populations
- **Weaknesses:** Lack of continuity with TVET systems, overly narrow and technical focus
- **Opportunities:** Value chains create new job types, emphasis on agricult. Entrepreneurship
- **Threats:** Lack of institutional support, out-migration from agriculture

Value chains

- A value chain is set of linked economic activities from production to consumption.
- Each activity adds value to the product or service.



Exercise

- In groups, discuss what occupations can be found in a traditional value chain, i.e. rice.



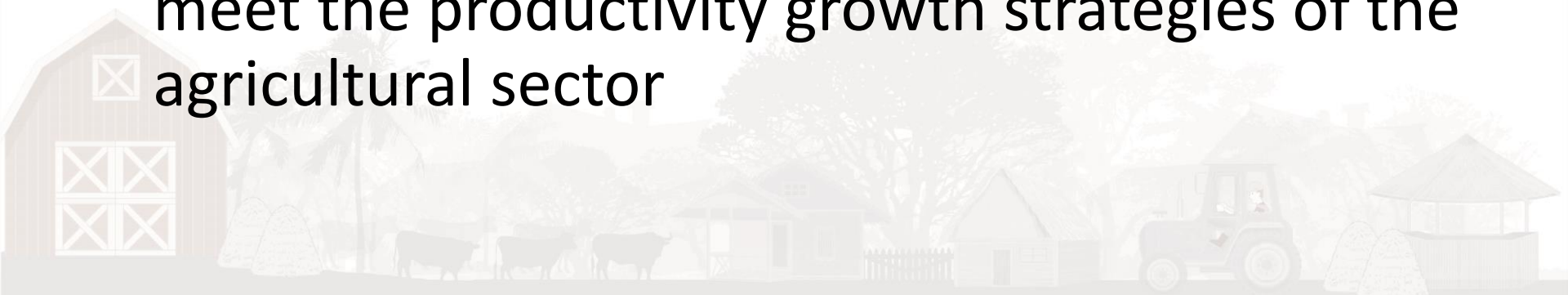
- GIZ VELA project conducted a study of vocational skills required in agricultural value chains in Lao PDR.





Study objective

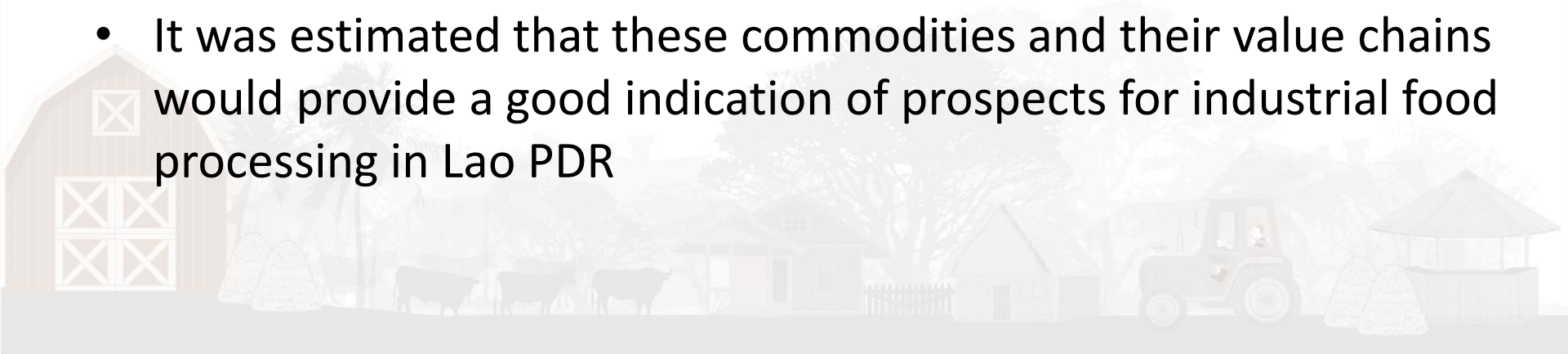
- To identify priority occupations and skills challenges in the agriculture and food processing sectors in medium and large enterprises in Lao PDR
- To guide the development of TVET qualifications and training programs which can meet the productivity growth strategies of the agricultural sector





Summary of main findings

- Six commodities were identified for short value chain analyses:
 - Sugar in Savannakhet
 - Rice in Khamouan
 - Meat in Vientiane Capital and Province
 - Dairy in Vientiane Province
 - Corn in Xayabury
 - Cassava in Xayabury
 - Coffee in Oudomxay
- It was estimated that these commodities and their value chains would provide a good indication of prospects for industrial food processing in Lao PDR



Summary of main findings (cont.)

- All the value chains are short, with a limited number of actors and with limited value created.
- Most value chains are dominated by a large company that coordinates the activities of all other actors.
- Most companies carry out all activities, from planting/raising animals to processing and distributing.
- Division of labour is minimal.
- The processing is mostly very basic: drying, milling, cutting.





Summary of main findings (cont.)

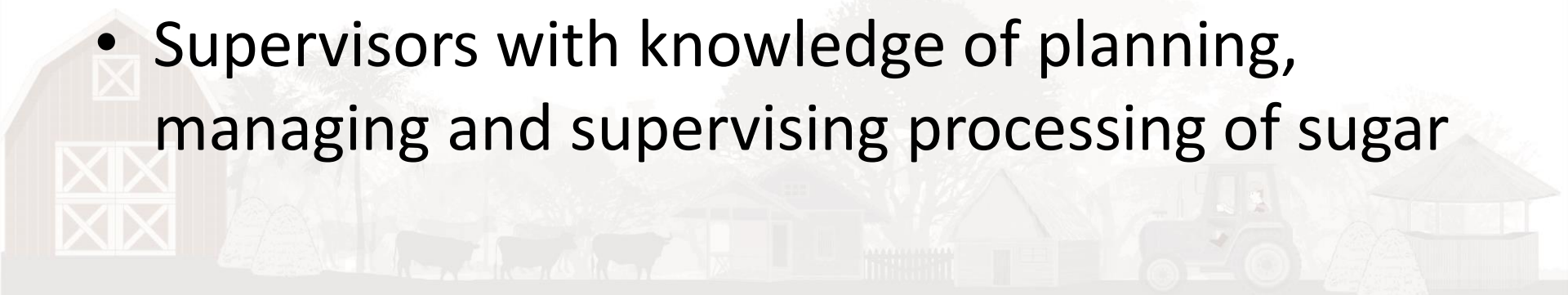
- Use of modern technology and equipment is minimal.
- Education level of staff tends to be low (primary or secondary level).
- Most companies train all their staff in-house. They have no links with agricultural colleges or universities.
- They have weak links with other chain actors, i.e. suppliers, extension workers, other service providers.
- Potential for growth of the sector is large, but many obstacles in the way, including knowledge, technology, capital, marketing, competition from Thailand and Vietnam.



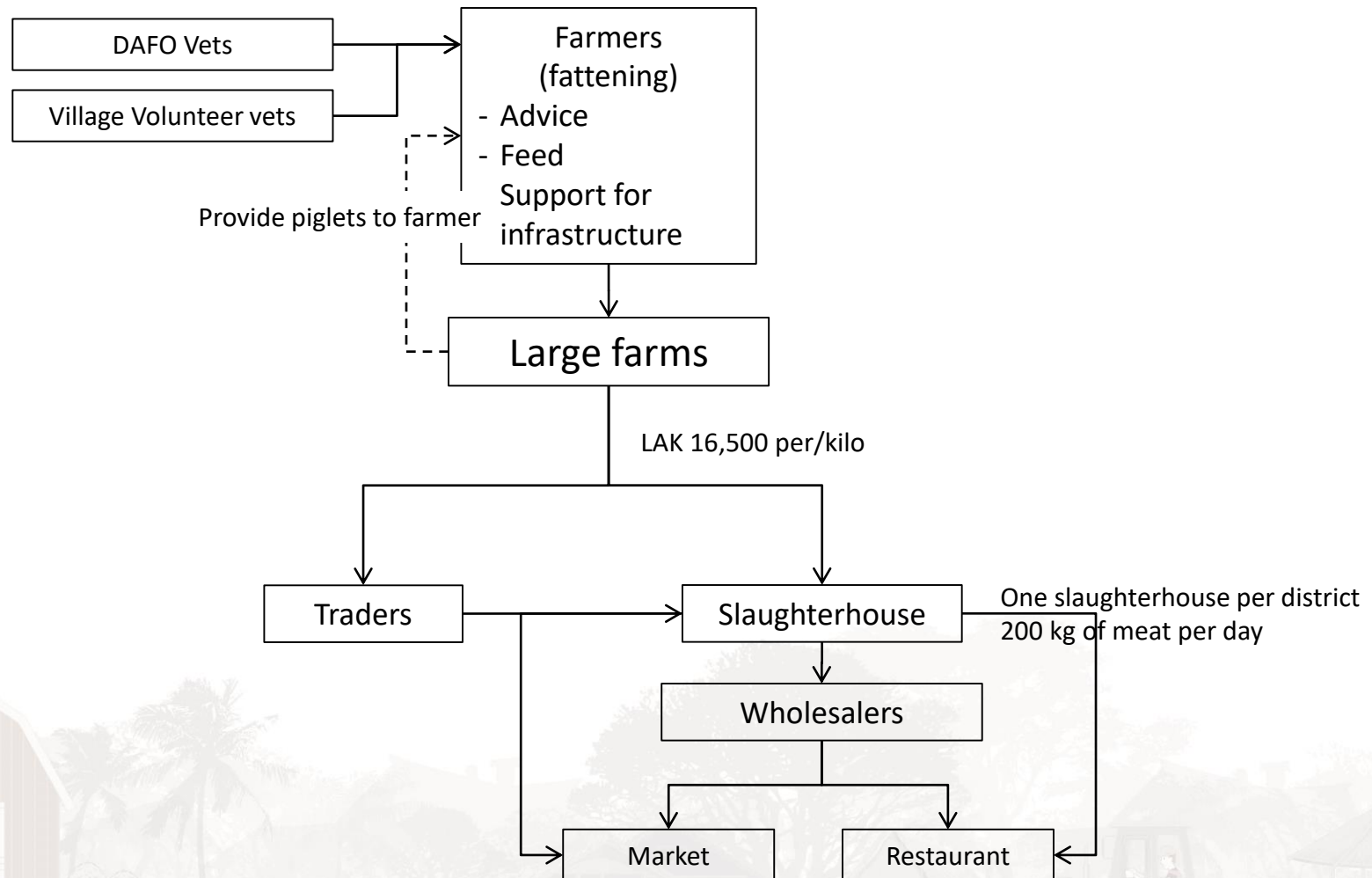


Skills/jobs demands

- Extension workers / agronomists with knowledge of sugar cane production
- Ag workers with knowledge of machinery (tractors, ploughing machines, harvesters)
- Factory workers with knowledge of mill machinery operation
- Supervisors with knowledge of planning, managing and supervising processing of sugar



Pig supply chain in VTE Capital





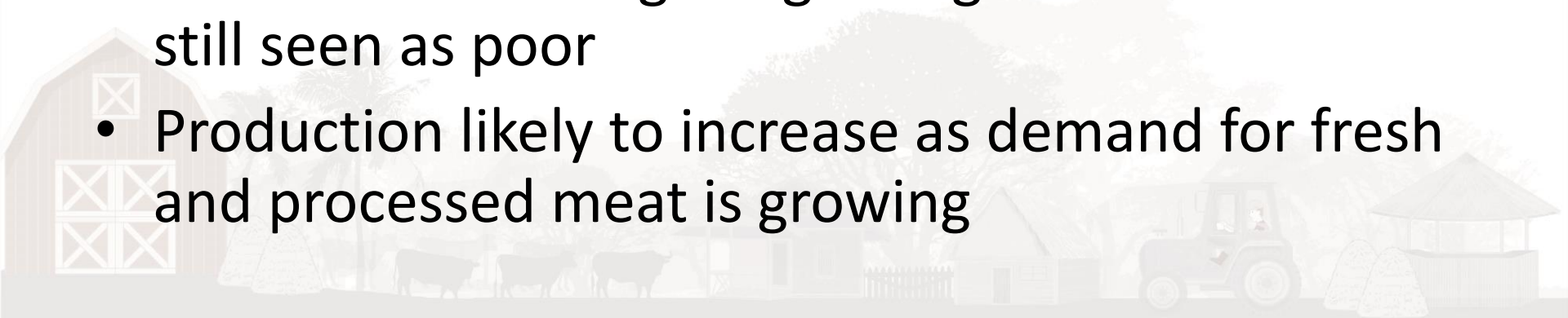
Characteristics of meat supply chain

- Supply chain fragmented between many small farmers raising pigs and selling to traders and slaughterhouses with limited technical advice and large farms with better coordination between actors and better production techniques and conditions (hygiene, safety, etc.)
- Farmers that have contracts with large farms receive technical advice and inputs
- Processing of food is limited, only a few companies process meat
- Livestock farms can be large with hundreds of staff
- Education level of staff at large farms is diverse, from primary to secondary level and technical level. Large farms have some higher educated staff to conduct the most technical operations.



Characteristics of meat supply chain

- There is a limited division of labour – most workers learn and have to do multiple activities and are expected to switch tasks when necessary
- Most staff is trained internally by older staff or supervisors
- Some links with Lao ag colleges or universities, but level of training at ag colleges and universities still seen as poor
- Production likely to increase as demand for fresh and processed meat is growing





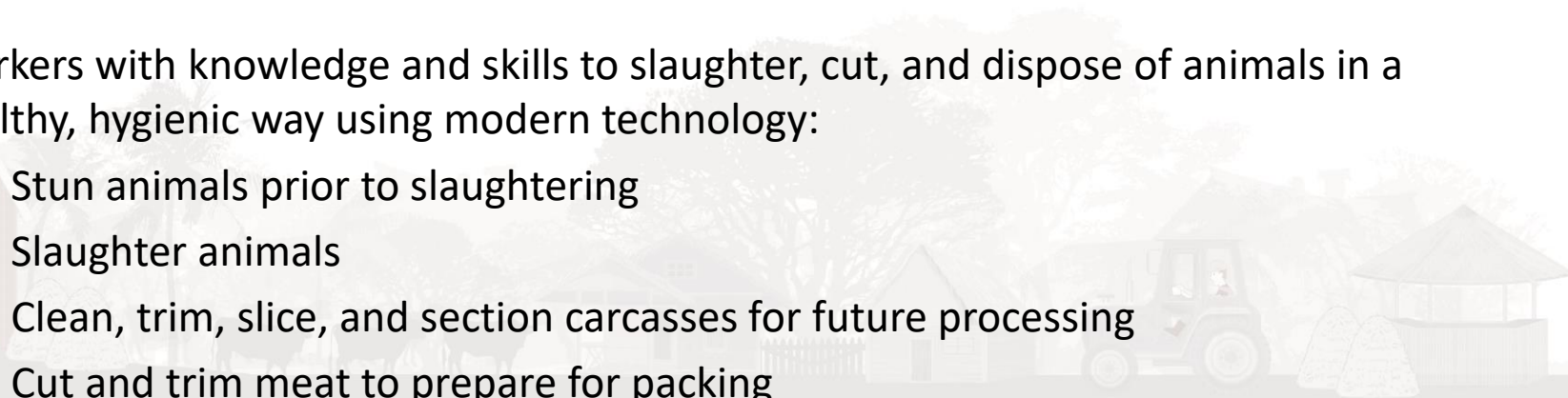
Characteristics of meat supply chain

- There are no livestock markets, livestock is marketed on farm gate
- Public district slaughterhouses have very low standards, poor hygiene conditions and limited capacity to monitor diseases
- Staff at slaughterhouses usually have no formal education, learn on-the-job
- Capacity of DAFO vets to monitor conditions in slaughterhouses is limited
- There is no cold-chain to transport and distribute meat
- Fresh meat at markets is usually not kept on freezers



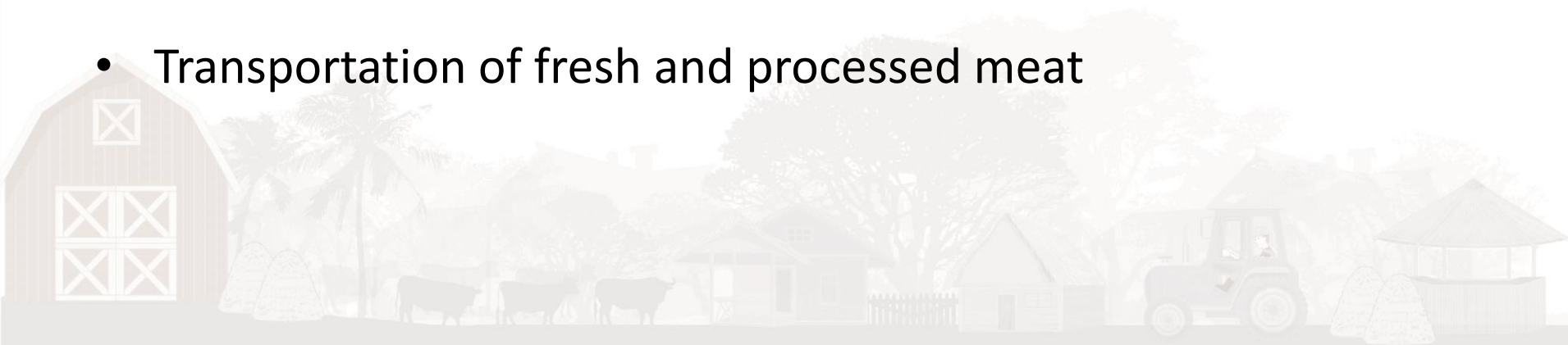
Skills/jobs demands

- Farm workers with basic skills on livestock raising:
 - Cleaning sites
 - Animal cleaning/washing
 - Preparing feeds and delivering feeds
 - Health monitoring / weighing
 - Assistance in farrowing
 - Transportation of animals
- Farm veterinaries
- Workers with knowledge and skills to slaughter, cut, and dispose of animals in a healthy, hygienic way using modern technology:
 - Stun animals prior to slaughtering
 - Slaughter animals
 - Clean, trim, slice, and section carcasses for future processing
 - Cut and trim meat to prepare for packing



Skills/jobs demands

- Lab technicians
- Process meat for marketing:
 - Grind meat
 - Prepare sausages
 - Dry and smoke meat
- Transportation of fresh and processed meat





Thank you



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