

Reflection paper

Joyful rural life: cooperative farm in Qilian



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as part of

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Date

26 November 2019

Aspect 1 the relationship between research and design.

My research is in rural China, which the purpose is to use circular agriculture as a tool of rural revitalization. With the analysis of the existing farms, I found the possible positive food and energy flows to design a new cooperative farm. The purpose is to create job opportunities to the leaving local people to come back and have a better life quality. Meanwhile, based on the developing tourism, the new farm could be a space for both local people and tourists to enjoy rural life here.

From the analysis of the existing farms, the programs of the new cooperative farm can be recognized as the conclusion of it. And my architectural design will also base on this. As it comes from the existing analysis, the program could be adaptive already. The research of the positive flow is the foundation of my design to settle down programs. With the new job possibility, the leaving people can come back. The research could also give the data to calculate how much space of the biogas digester and CHP plants require, which influence the further massing testing in design part. As the flow diagrams show how different programs influence each other, I will try to organize the programs that can benefit from each other together to make it more efficient.

Meanwhile, the existing analysis will also give me some inspiration to plan the farmland and vegetable garden as landscape to link different programs. In addition, the craft man farmer also inspired me about the idea of a cultural center. According to Li Changpiing, a Chinese socialist, one important difference between rural area and city is the social activities, which is one of the main reasons the young people want to go to big cities¹¹. Qilian is such area with long history and the mix nationalities creates the rich cultural resource to be used. However, the cultural identity is on the way losing because of the population reduction. The reorganized cooperative farm can provide jobs to attract people to come back, the cultural center could also provide leisure service to both local people and tourist. The combination of technology and cultural program can collaborate with each other to help Qilian's rural revitalization.

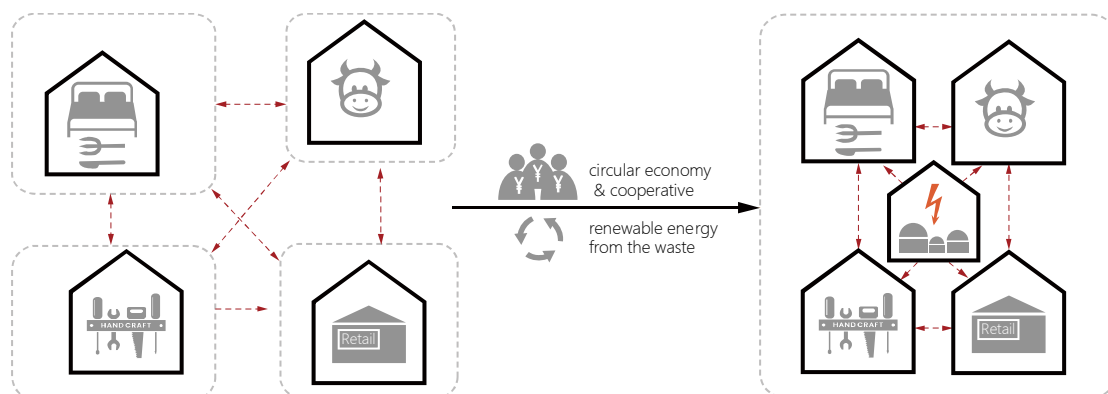


Fig.1: from the existing business to a new cooperative farm

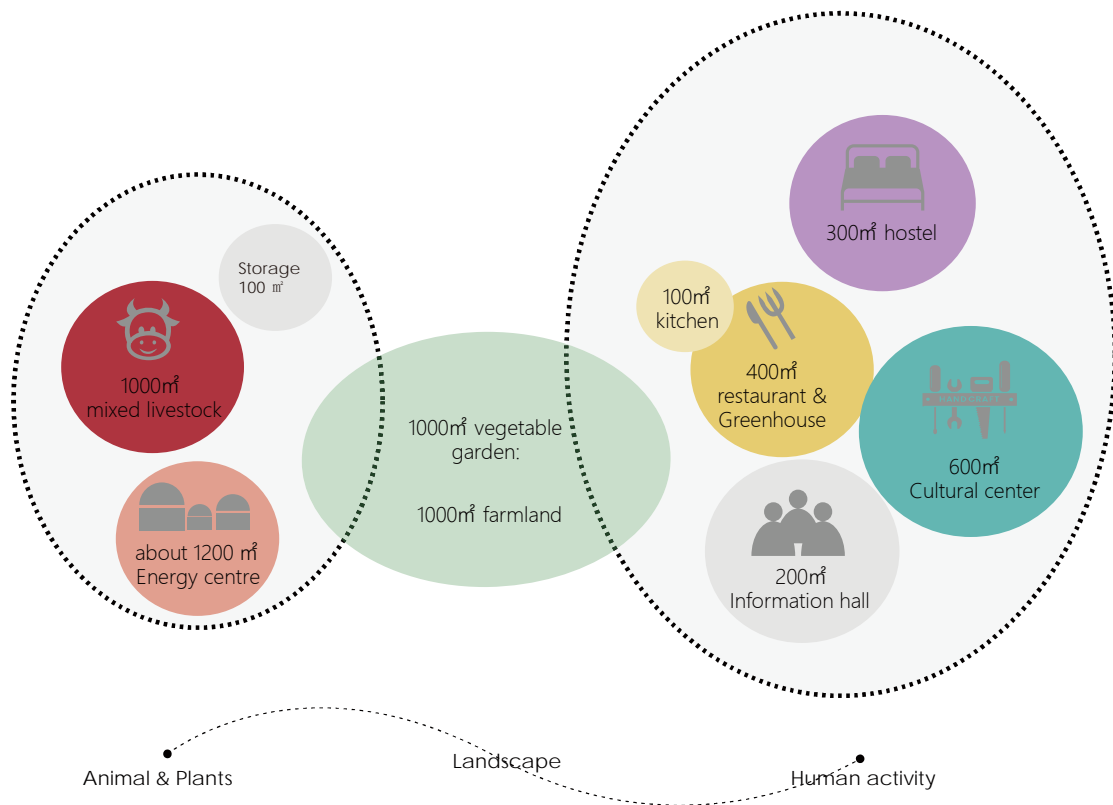


Fig.1: Programmatic configuration of new cooperative farm after research

Aspect 2 the relationship between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS).

Architecture Engineering is a studio where focus on the combination of aesthetics and technical skills. Those Technical skills applied in architecture are charming for me. Designs in AE are supposed to be more concrete, which is what I prefer. Knowing more about the technique knowledge is helpful for me to find the architectural solution for existing problems.

My topic is to find an architectural solution to bring back villagers from big cities to their home: Using new farm to improve human life quality in Chinese rural area. I researched the way to reuse the waste to produce energy and re-organizing the business model of local farm to attract people back and work. Meanwhile, it could also improve the environment in Qilian. The technical research is an important tool during my research to think about how to improve the local people life quality, which is about energy, food, landscape and also a good architecture atmosphere.

Aspect 3 Elaboration on research method and approach chosen by the student in relation to the graduation studio methodical line of inquiry, reflecting thereby upon the scientific relevance of the work.

The methodical approach of this graduation lab is:

1. research the site context and write an 8-page scientific paper based on this research
2. design an architectural intervention base

The work of scientific paper could give a narrow direction of afterwards design work and is helpful to set design principle. It is a basic that could be used in design to correspond to some pragmatic issues. Then design could be worthier to refer to.

For my research, I started the existing flows of local farms, then I found the possible business model and positive flows for a new farm. With the research, the programs have a layer of scientific basis to help architectural student an overview of the technical solutions.

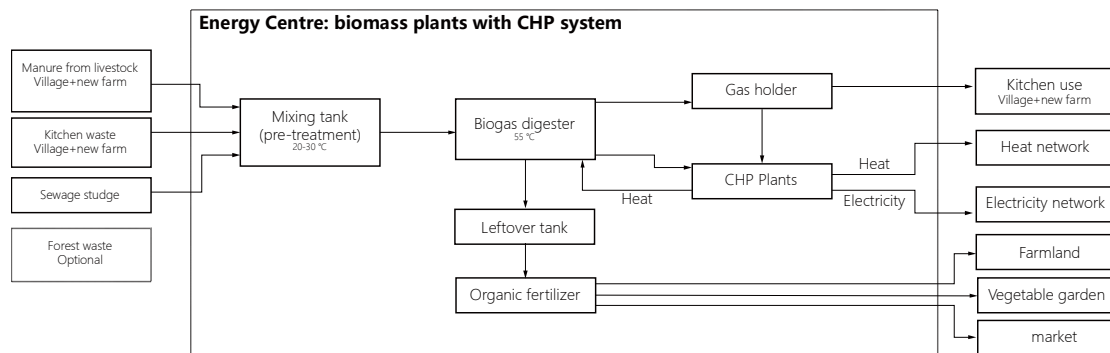


Fig.3: the flow of energy center: transfer the waste and mature into energy (drawn by author)

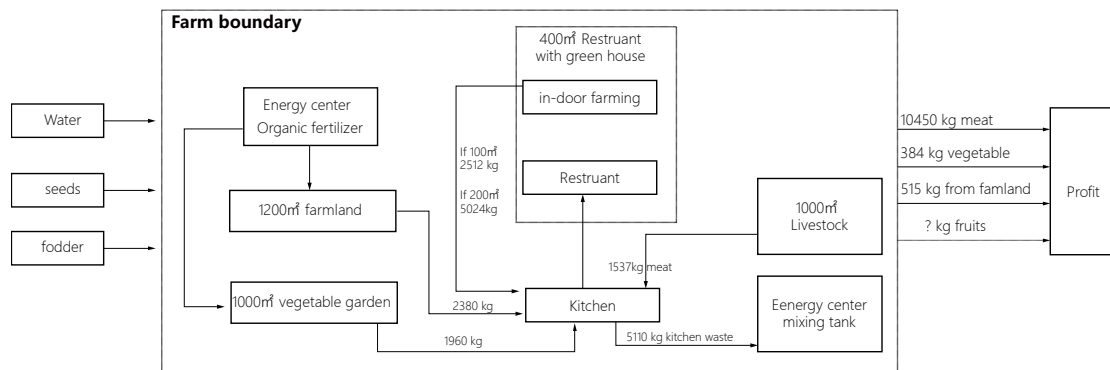


Fig.4: the food flow in new cooperative farm

Aspect 4 Elaboration on the relationship between the graduation project and the wider social, professional and scientific framework, touching upon the transferability of the project results

The start of graduation project is basic on the specific scientific question in a existing city/village and the adapting in an architectural solution. Meanwhile, with the existing business model analysis, the result could provide an extra layer in social frame work, to create economic income for local people.

The new cooperative farm will include a energy center to using the waste stuff to produce energy. It could build a scientific basis of my project to bring the village to a green future. And the new programs also include the cultural layer to evoke local people to protect their vernacular traditions. It could be an architectural solution to upgrade the vernacular things.

Aspect 5 Discuss the ethical issues and dilemmas you may have encountered in (i) doing the research, (ii, if applicable) elaborating the design and (iii) potential applications of the results in practice

Architects always want to use the theoretic method to design and solve the problem for local people; however, it would be super difficult in the rural area. It will be hard to investigate the aesthesis of local people, and sometimes it will be super different from architectural view and local people's view. When I doing the research, I need to be critical what might be really useful to keep as an tradition and local people will like it and what might be the imagination of architects.