

# Elimene一家的援助计划

## Our Plan to help Elimene's Family

惠灵顿杭州校区

WELLINGTON COLLEGE HANGZHOU

# 农业计划

## Plan agriculture

我们计划为这个家庭再买15只鸡和3、4只小猪。

之选择这两种动物，是因为它们的生长周期很短，几乎不需要饲料费用，地上的任何东西都能吃。鸡成熟后每1至3天就能产蛋，猪在35天大的时候即可出售。

让该家庭通过出售鸡蛋和每35天出售猪，获得持续收入。猪的排泄物可以作为肥料，恢复地面营养。

Our group have decided to buy 15 more chicken and 3-4 more piglet for the family.

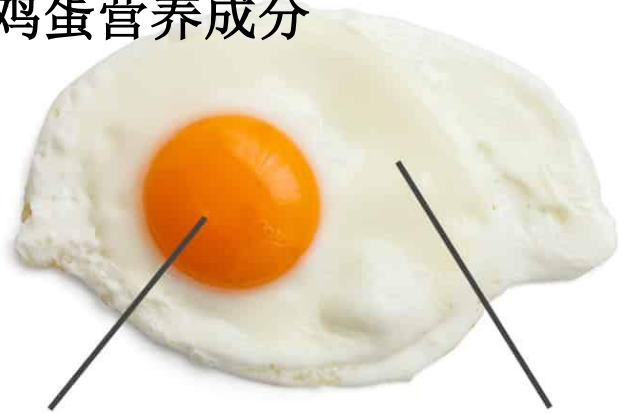
The reason that we chose these two animals is because they both have a short growth cycle, almost cost 0 \$ for food and will also eat everything on the ground. As they will grow up, chicken can produce egg every 1-3 days, and we can sell pig when they will be 35 days old.

The main purpose is to let the family gain a sustained income by selling eggs which will be produced by chicken everyday and sell the pig every 35 days. The excretions of pigs can be used as fertilizer to recover the nutrients in the ground.



# Egg Nutrition

## 鸡蛋营养成分



蛋黄

### Yolk

<b>Fat</b>	<b>4.5 g</b>
<b>Sat. Fat</b>	<b>1.6 g</b>
<b>Cholesterol</b>	<b>184 mg</b>
Carbohydrates	0.5 g
Protein	2.5 g

脂肪  
饱和脂肪  
胆固醇  
碳水化合物  
蛋白质

### White

Fat	0 g
Sat. Fat	0 g
Cholesterol	0 mg
Carbohydrates	0 g
<b>Protein</b>	<b>4 g</b>

蛋白

脂肪  
饱和脂肪  
胆固醇  
碳水化合物  
蛋白质

选择鸡蛋的原因  
鸡蛋可为该家庭提供  
丰富的营养

Reason why we  
chose eggs

It contains large  
amounts of nutrition  
that they will need

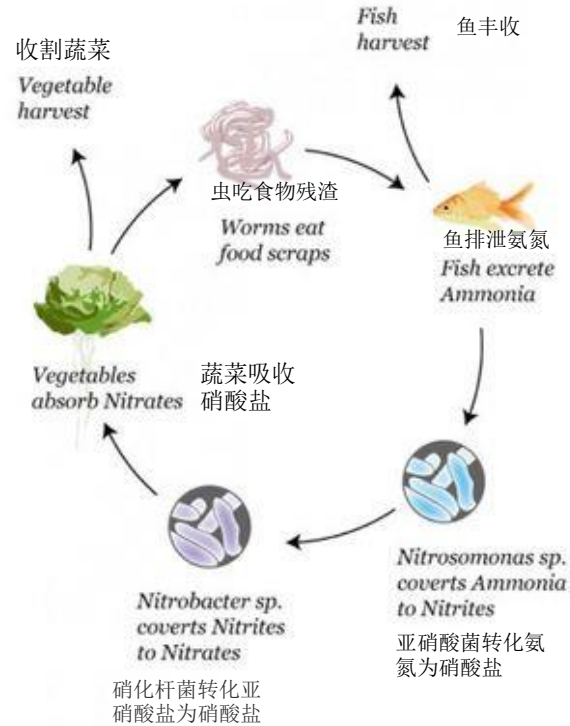
# 预算页 - 小猪和小鸡

## Budget slide – for pigs and chickens

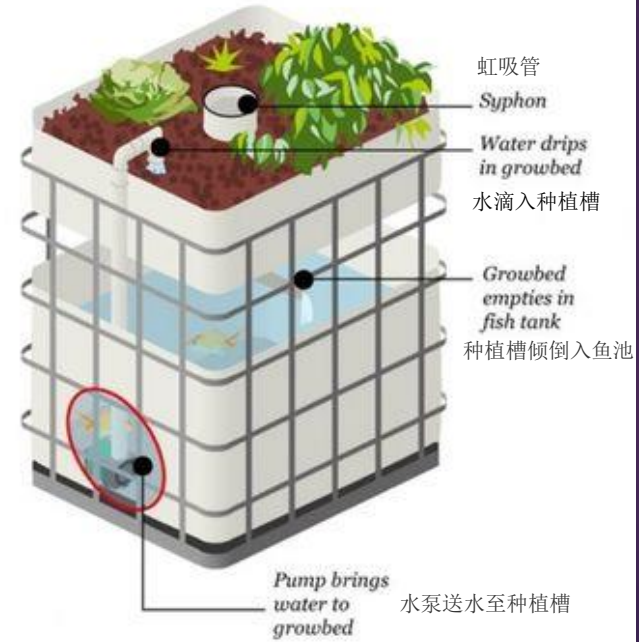
项目 Items	预算估值 Budget (evaluate)
小鸡 chicken	7.5-10 磅 (十只小鸡) £7.5-10 (for 10 chicks)
小猪 piglet	25-30磅 (四只小猪) 25-30£(for 4 piglets)
育成鸡 Matured chicken	5-7.5磅 (5只鸡, 至少一只公鸡) 5-7.5£ (5 chicken with at least 1 male chicken)
共计 (最高) Total (maximum)	150-12.5-25=112.5£磅
共计 (最高) Total (minimum)	150-17.5-30=102.5£磅

# 鱼菜共生 Plan-Aquaponics

鱼菜共生系统  
Aquaponics Cycle



小型系统  
The Small System



Els Engel

# 什么是鱼菜共生?

## What is Aquaponics?

- ▶ 鱼菜共生是对一个完整生态系统的管理，其中任一项输入都将不可避免地与其他一切发生作用。鱼菜共生依靠的是自然的生物过程，将随着时间的推移促进生长、减少维护、降低疾病率。
- ▶ 我们用鲈鱼鱼苗实现鱼菜共生。
- ▶ **Aquaponics is the management of a full ecosystem; an input will inevitably interact everything else in the system. Aquaponics relies on natural biological processes and allows a better growth, less maintenance, and lower disease rates over time.**
- ▶ **In our case, we use baby perch fish to interact with the plant.**



# 鲈鱼

## Fish--perch

我们要如何帮助安装鱼菜共生系统呢？我们会提供一些鱼！

- ▶ 我们将提供30条可用于鱼菜共生的鲈鱼鱼苗。
- ▶ 每尾鲈鱼鱼苗的价格是0.39。
- ▶ 此时，喂鱼苗吃我们提供的鱼食。
- ▶ 鱼的排泄物含矿物质和氮，可用于为植物提供营养。

**What are we going to do to help you install aquaponics?  
We are going to provide some fish for you!!!**

- ▶ **We will provide 30 baby perch fish which can be used for aquaponics.**
- ▶ **The price for each one baby perch is 0.39.**
- ▶ **In this case fish will be fed fish food which we will have provided.**
- ▶ **We can use the waste of the fish, which contains minerals and nitrogen, to provide nutrition for the plant.**



# 水培蔬菜 - 芹菜

## Planting vegetables on water Celery

- ▶ 水生蔬菜是指可无土水培的蔬菜。在大多数情况下，将蔬菜种子放入无土的水中会导致其死亡。其实，所有植物都有在水中生长的潜力，土壤只起到固定植物的作用，并不是必需。水培的方法非常适合芹菜、甜玉米、水竹、生菜、菊花等植物。水培蔬菜时，要在水面上搭建漂浮架，下置泡沫，再用塑料或木材固定。
- ▶ 在泡沫上挖少许直径5厘米的圆孔，将菜苗放入孔中，让根部接触水面。
- ▶ 蔬菜营养来源是鱼排泄物，达到共生的目的。此时，蔬菜并不依赖土地。
- ▶ **Aquatic vegetables refer to vegetables grown on water without soil. In most cases, putting vegetable seeds into water without soil, will cause them to die. In fact, all plants have the potential to grow in water and do not necessarily need soil to grow, soil only plays the role of fixing plants. Vegetables are especially suitable for planting in water; this includes celery, sweet corn, water bamboo, lettuce, chrysanthemum and so on. In order to grow vegetables on water, it is necessary to build floating shelves on the water, usually with foam below, which is then fixed with plastic or wood.**
- ▶ **On the foam, dig some round holes with a diameter of 5 centimetres, put the vegetable seedlings in the hole, and let the roots contact the water.**
- ▶ **Its nutrient source is the excreta of fish, which achieves the purpose of symbiosis. And it doesn't need to rely on land.**





# 如何通过鱼菜共生的方法实现该计划的可持续发展?

## How do we use the method of aquaponics to make our plan sustainable?

- ▶ 我们需告知该家庭，实施鱼菜共生计划，要挖一个长宽高为8\*12\*0.5的长方体，每天都要查水、加水（避免水蒸发量过多）。
- ▶ 鱼塘内种植水稻幼苗、养鱼。
- ▶ 鱼排泄物可为水稻幼苗提供营养。因此，这是一个可循环的环保过程。
- ▶ **We will have to let the family know that, to perform aquaponics we will need to dig a rectangular shape with LWH of 8\*12\*0.5 and they will need to check the water and add water every day (this will avoid too much water evaporating).**
- ▶ **We will plant rice seedlings in the pond and put fish in it too.**
- ▶ **We can provide the nutrition to the paddy rice seed, using the waste product of fish. Therefore, this process is recyclable and environmentally friendly.**



我们的  
项目示意图  
This is what  
our product  
will look like



## 营养成分

分量为1/2鱼片	178g
每份含量	
热量 367	脂肪热量198
	%每日量
总脂肪 22g	34%
饱和值 4g	30%
反式脂肪 0g	
胆固醇 112mg	37%
钠 109mg	5%
总碳水化合物 0g	0%
膳食纤维 0g	0%
糖 0g	
蛋白质 39g	
维生素A 2%	维生素C 11%
钙 3%	铁 3%

每日量百分比的饮食基数为2,000单位热量，会根据个人热量需求而变化。

## NUTRITION FACTS

Serving Size 1/2 Fillet 178g

### Amount Per Serving

Calories 367	Calories from fat 198
	% Daily Value
<b>Total Fat 22g</b>	<b>34%</b>
Saturated Fat 4g	30%
Trans Fat 0g	
<b>Cholesterol 112mg</b>	<b>37%</b>
<b>Sodium 109mg</b>	<b>5%</b>
<b>Total Carbohydrate 0g</b>	<b>0%</b>
Dictary Fiber 0g	0%
Sugars 0g	
<b>Protein 39g</b>	

Vitamin A 2%	Vitamin C 11%
Calcium 3%	Iron 3%

Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calories needs.

# 选择鱼的原因

# 鱼富含营养

# Reason why we chose fish

# It contains large amount of nutrition

# 预算页 - 鱼菜共生

## Budget slide – for aquaponics

项目 Items	预算估值 Budget (evaluate)
鱼 fish	5-10磅 (30-60尾磷虾), 鱼饲料月费用为5磅及以上 (直至得到可持续收入并不再需要预算支出) 5-10£(for 30-60 krill) 5£ or above for monthly food for fish(until they have sustained income don't need budget money)
运水桶 Barrel (for transport water)	1磅 1£
人力 Human resource	0-10磅 (取决于该家庭劳动力) 0-10£(depends on how much the family can do)
水稻苗 Rice seeds	5/千克 (该家庭需培育水稻幼苗, 可能有损耗) 5/kg(family need to raise rice seedlings, so there might be some waste)
共计 (最高) Total (maximum)	$112.5 - 5 - 1 - 5 = 101.5$ £磅
共计 (最低) Total (minimum)	$102.5 - 10 - 1 - 10 - 5 * 3 - 5 * 6 = 36.5$ £磅

总而言之，预算会有结余，可用于帮助提高该家庭生活水平。

**To conclude, there will still be a surplus budget, which can therefore be used to help increase their standard of living for the family.**

# 更多想法

## Extra Idea

这一项目可以同时开展，也可以单独进行。我们希望通过筹款或慈善活动筹集更多资金，助力实现更简洁的计划，帮助该家庭获得更好的生活质量。

**This can be a simultaneous project or a separate project.**

**We want to help raise more money to the through fundraising or charity events to help us achieve a more concise plan and help them obtain a better quality of life.**

## 我们将：WE WILL:

- 组织筹款或慈善活动。
- 举办线上或线下的活动或项目。
- 在红十字国际委员会的网站上描述海地人面临的苦难，展示Elimene的家庭对生活的热爱。虽然地震摧毁了他们的家园，但他们仍在努力改善自己的生活方式。
- **Organise fundraising or charity events.**
- **Hold activities/events online or offline.**
- **Describe the problems faced by Haitians on International Committee of the Red Cross' website and show Elimene's family has a huge devotion to life. Even though their home has been destroyed by the earthquake, they are still trying to ameliorate their lifestyle.**

感谢聆听

Thank you for taking the time  
to listen to us

惠灵顿杭州校区 WELLINGTON COLLEGE HANGZHOU