Insects as a sustainable food source

Over the past few years there has been a rapid increase in public awareness about the resources used to produce the protein we eat, like meat, fish, soybeans and whey. In response, insects have emerged as a new sustainable protein source and spawned a burgeoning edible insect industry in the U.S. currently valued at $20 million and growing rapidly.

Slightly Nutty will be the first commercial producer of protein powder made from sustainably raised crickets fed on locally sourced organic waste streams. Crickets can be roasted and milled into fine powder and used as a protein source and partial flour substitute in a variety of food products like nutrition bars, baked goods and snack foods. Cricket powder is 60% protein (dry weight) and contains healthy omega-3 fatty acids, B vitamins, iron, calcium and other nutrients.

Our target customers are the growing number of companies using cricket powder in their products.

Our business model solution

To solve our customers’ problems, we have developed a business model that can produce large amounts of sustainable cricket powder at a low cost. Slightly Nutty plans to occupy a 5,000 square foot warehouse in Santa Barbara County. At this size, we have the capacity to produce 25 tons of cricket powder each year.

1. Collect the organic byproducts from our local brewery and juice partners. We obtain these byproducts free of charge.
2. Our crickets are euthanized, roasted, and milled into cricket powder, then packaged and shipped to our customers, primarily food product manufacturers in the edible insect industry.
3. $20-25/lb.

A sustainable solution to protein production

Over 80,000 lbs. of cricket powder was produced in the U.S. last year, requiring 4,000,000 lbs. of chicken feed. Chicken feed contains crops like soy and wheat, which require large amounts of water and land to produce.

A cricket farm like we propose, capable of producing 30,000 lbs. per year, will use 210,000 lbs. of feed per year.

The annual water and land savings associated with Slightly Nutty's process, relative to current production practices, are as follows:

- Hundreds of gallons of water per 1 lb. protein
- Square meters of land per 1 lb. protein

Our customers: Not enough sustainable cricket powder

Based on over 50 customer interviews, we learned that companies in the U.S. edible insect industry cannot produce their products as truly sustainable.

Crickets are fed environmentally expensive chicken feeds, and these companies would prefer using cricket powder that is less resources-demanding to produce.

Furthermore, these companies have indicated that there is insufficient supply of food grade cricket powder available to meet their growing needs, and that cricket powder is too expensive.

$30/lb.

At $30/lb., cricket powder is too expensive for most product manufacturers to use as an ingredient in the amount they desire.

Demand for cricket powder is rapidly growing and outpacing supply.

Future vision: expansion into pet and aquaculture feeds

Slightly Nutty is taking the first step in shifting the way protein is produced in a sustainable manner. Beyond crickets, a multitude of insects can be efficiently farmed and raised on food waste.

Insect protein is also a suitable ingredient in pet and aquaculture feeds, dramatically reducing the environmental impacts of these products by replacing less sustainable ingredients like fishmeal and soymeal.

We plan to leverage our expertise raising crickets on food waste to expand our product line to include a variety of insect meals suitable for pet and aquaculture feeds.

Acknowledgements

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Our competitive edge

The following are Slightly Nutty's strategic advantages in gaining and maintaining market share supplying protein powder to the U.S. edible insect industry:

- Our proprietary feed mixture of recycled organics results in large operational cost savings of $50,000-$200,000 per year compared to similar operations. This is because we obtain our feed free of charge, whereas other operations pay between $0.80 and $1.50 per lb. for feed.
- First mover advantage as the only producer of sustainable protein powder made from crickets fed recycled organic streams.
- Our scientific background and rigor, applied to our long term commitment of operational sustainability and efficiency.

“A team at Slightly Nutty is exactly what the insects on food industry needs to foster the growth of promising new food supply in sustainable and innovative ways.”

- Pat Crowley, CEO of Chapal

A growing market for a scalable business

The total edible insect industry is expected to grow from $20 million to over $180 million over several years, cricket powder producers represent 20-25% of this industry. We anticipate capturing 80% of the cricket powder production market given our first mover advantage, low cost and value-added product.

$1 million gallons of water = 610 avg. CA homes

15 million sq. feet of land = 150 city blocks

Demand for cricket powder is growing and requires the use of large amounts of water and land.

Pet Feeds $30 billion

Aquaculture Feeds $60 billion

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Our customers: primarily food product manufacturers in the edible insect industry.