19 Laurel

Jellieval

【Background info】

One of the main causes of desertification is the drought that is incited by overpopulation. Kenya faces one of the most severe cases of desertification due to a rapid increase in population; existing land has been unable to catch up with this. People's attempt to maximize land has led to critical problems such as deforestation and excessive water usage, leading to ineligible and arable land. As a result, in Kenya, two-thirds of the land is unavailable for use.[1] Crop and livestock have drastically decreased. What this means is that there is insufficient food for the population in Kenya. Indeed, Kenya has been facing a devastating situation due to desertification. In order to solve this issue, we would like to propose a business model using a high water-content Jellyfish sheet to revive the deserted land. This can invigorate the cycle of crop growth as it stores water and disperses its water to the soil that has lost water-holding capacity due to desertification. The utilization of Jellyfish can also decrease the amount of blooming jellyfish that have been known to pose threats to the fishing industry and other marine animals.[2]

[1]:https://www.prb.org/resources/africas-struggle-with-desertification/

[2]:https://www.bbc.com/future/article/20120405-blooming-jellyfish-problems

【Target Market】

Kenya has been experiencing severe droughts and land desertification.[3] This has harmfully affected Kenya's agriculture. As the agriculture sector employs more than 70 percent of Kenya's rural population, desertification is an urgent issue that needs to be solved. Survivors of drought have claimed to have suffered from hunger. Thus our business aims towards the rural population in Kenya who practice self-sufficient farming.[4] Our business Jellieval revitalizes unavailable land that is the ultimate cause of hunger that devastates these populations. Not only those who had already depended on self-sufficient practices, but those who wish to engage in self-sufficient crops in the future can attain benefits from our business.

[3]:https://special.nikkeibp.co.jp/as/201207/africa/vol3/step1_p3.html

[4]:https://www.mofa.go.jp/mofaj/gaiko/oda/files/000074664.pdf

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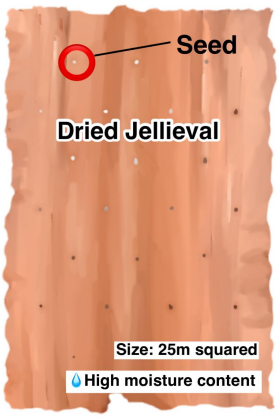
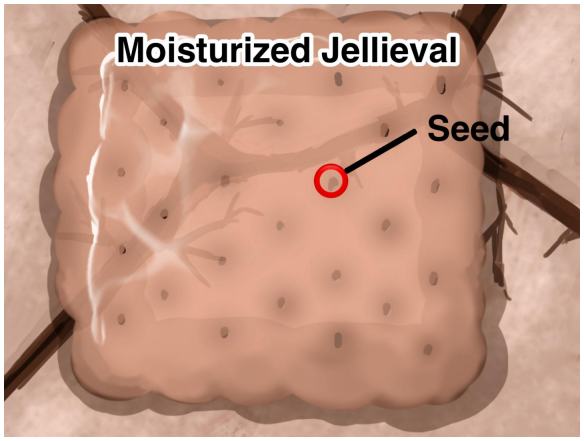
【Product/Business explanation】



Our product, Jellieval, is a 25-meter squared sheet made out of dry-jellyfish which has a high water content to preserve the dried land. This thin sheet can cover the seeds that are planted on the dried land.



Although there is little rain in dried areas, when it rains, this sheet will preserve the water and moisturize the soil. Jellyfish are about 95% water, and are also 80%-90% made of collagen, which can absorb and retain a large amount of water which is suitable for drylands. We will dry the jellyfish by using an osmotic pressure method. Not only will the sheet preserve the water, but it can also increase the content of inorganic substances such as nitrogen, phosphoric

acid and potassium which can fertilize the soil. From this, the soil will not get dried up, and the lack of rain will not be a problem of plants not growing and people not having enough food. This new and revived land will then be sold to people who were negatively affected by desertification, or people who want to self-sufficiently produce food themselves. With the continuation of the use of Jellieval, there will be green land all around the deserted areas.

【Marketing】

In order to popularise our product, we will be promoting ourselves through eye-catching advertisements on local buses and billboards to gain public attention. We will also be cooperating and collaborating with some local NGOs that share the common goal of prioritizing our Earth, and promoting sustainable development, to expand our brand image and name. Moreover, we will create a website that contains detailed and comprehensive information about our product, which will allow our customers to visualize the process of Jellieval, and how it will revive lands and soils that have been damaged.

【Finance】

We expect our product to reach break-even in the third year, coming up at $46,750. Our business startup will be $8100, in which our first-year operating expenses will be approximately $194,086, whereas 56.4% will be covered for development, 34.8% on legal. The profit will be generated from the sales of Jellieval and the sales of cultivated land.[5]The price per sheet(5m×5m) is $230 and the price per acre of cultivated land is $4500. The sales are approximated from the average cultivated land owned per person in Kenya. [6]Jellieval is mainly based in Kenya, but we expect to expand globally as Jellieval earns more public recognition.

[5]:https://www.maff.go.jp/j/council/seisaku/kikaku/bukai/pdf/genjyou.pdf

[6]:https://www.pigiame.co.ke/land-for-sale

Profit & Loss Statment	Year 1	Year 2	Year 3	Year 4	Year 5
Revenue (+)	161,000	195,500	320,000	480,000	537,000
Price per sheet, 5m×5m)	230	230	230	230	230
# of sheets sold (5m×5m)	700	850	1,000	1,500	1,650
Price of cultivated land(per acre)	4,500	4,500	4,500	4,500	4,500
# of land sold (acre)	0	0	20	30	35
Production Cost(-)	-159,000	-177,000	-195,000	-280,000	-323,000
Production cost per sheet (5m×5m)	120	120	120	120	120
# of Sheet produced (5m×5m)	700	850	1,000	1,500	1,650
Cultivation cost per land (acre)	2,500	2,500	2,500	2,500	2,500
# of land produced (acre)	30	30	30	40	50
Gross Profit(+)	2,000	18,500	125,000	200,000	214,000
Operating Expenses (-)	-76,664	-77,000	-77,500	-78,000	-80,500
Advertising/marketing	30,664	31,000	31,500	32,000	34,500
Rent	3,500	3,500	3,500	3,500	3,500
supplies	500	500	500	500	500
insurance	5,000	5,000	5,000	5,000	5,000
development	11,000	11,000	11,000	11,000	11,000
staff salary	8,000	8,000	8,000	8,000	8,000
Other	18,000	18,000	18,000	18,000	18,000
Earning before Tax(+)	-82,764	-58,500	47,500	122,000	133,500
tax(30%) (-)	-24,829	-17,550	14,250	36,600	40,050
Net Income(+)	-107,593	-76,050	61,750	158,600	173,550
Funding Required(+)	15,000	15,000	0	0	0
Loan Required(+)	0	0	0	0	0
Divident Shareholders (-)	0	0	-15,000	-15,000	0
Loan Payment (-)	0	0	0	0	0
Cash Flow (+/-)	-92,593	-61,050	46,750	143,600	173,550