DOSHISHA INT'L 「Kome88」

Executive Summary:

Cultivating terraced rice fields is labor intensive, which currently returns a relatively small profit. For this reason, many people have given up this type of farming. To reduce the amount of labor required, and increase the efficiency of growing rice on terraced fields, we have developed Kome88, a simple and easy to use cultivation sheet that lessens the demand for labor, reduces cost, and works with the local environment. Our product will complement the government initiatives to increase the number of people moving to the countryside to cultivate the land and reinvigorate local economies. Kome88 will make rice cultivating easier for current rice farmers and a new generation of terraced rice field cultivators.

1. Mission and objectives

A traditional Japanese saying is that there are 88 steps for making rice. From this it is clear that producing rice requires a lot of work, and due to the challenges of the current approach, rice cultivation in the terraces is at risk of vanishing. Compared to the rice cultivation on flat land, the land is smaller and the control of water is difficult, meaning that cultivation on lower lands of the terrace is difficult to grow. These difficulties lead more people to abandon their terraced rice fields; moreover, 67% of current farmers are older than 60 years of age. Given the prominence of rice in the Japanese diet and wider culture, losing this traditional source of agriculture would be an unforgivable act. To reverse this trend, while looking firmly to the future, "Kome88" plans to make rice farming easier, more cost-efficient, and also eco-friendly by using biodegradable superabsorbent materials. Kome88 aims to increase the number of people interested to farm on the terraced rice field.

2. Products and Services

Kome88 is made with carboxymethyl cellulose, similar to the research done by the University of Central Florida. It will come as a sheet that will consist of the seed and the fertilizer, which will eliminate the labor of planting the seed and ensure strong healthy plants. It will be available in 1 meter by 1 meter sheets, allowing the product to fit a range of land shapes and sizes. The sheets cover the land but do not need to be mixed into the soil, reducing the labor required to plough the land.

How the system works

1. Dry sheets are laid onto each level of land.
2. Water is turned on at the highest level and absorb water into the cellulose.
3. Gradually, the water saturates and the extra water overflowing will drain on to the next level of cellulose.
4. Each level of cellulose is gradually saturated and retains the required water for the growing process to successfully proceed.

After the harvest, the product dissolves into the soil, as the cellulose acts as a natural fertilizer. The sheet covers the land, preventing the growth of unwanted weeds. Therefore, it will reduce the usage of herbicides, drastically reducing negative impact on the surrounding environment.

3. Market(Industry) Analysis

We will initially target farmers working in lands that have limited space to use machinery for cultivation and supply of water. in addition, the simplification of the task will allow us to also target people in suburban areas who are interested living in the countryside. This approach will appeal to the increasing numbers adopting a 'Slow Life' approach to work and family balance.

4. Strategy and Implementation

We plan to approach our customers with two ways: One for the farmers struggling to cultivate in a limited space and other for people who are looking forward to live in the countryside.

Farmers

We plan to target farmers by partnering with JA to demonstrate the significant reduction in labor and maintenance, as well as the clear cost savings that Kome88 provides. We will advertise at JA events for the farmers at regular intervals, enabling the customer to take a look at the product in person. in addition, we will advertise on websites of JA to widen the potential customer base.

City People

The depopulation of many parts of rural Japan offers very competitive land and property rates that offer a much more balanced lifestyle than that of inner city life. By partnering with real estate companies in urban areas we can attract a new generation of rice farmers. By stressing how simple it is to start the cultivation along with their new residence, we believe it will motivate them to make the move, even for those with limited experience with agriculture.

5. Management

We plan to ask for the JA for advertising by aligning with their own objective of helping out the farmers. Our sheets will bring into effect by alleviating the amount of the farmer's harsh labor. The manufacture of the sheets will be done by the Toray Corporation that specializes in organic chemical synthetics. We will ask for the real estate companies for advertise as the land will be owned by them. The company will gain more advantage by selling more of their property for cultivation.

6. Financial Plan

(Amount in JP¥)	Year 1	Year 2	Year 3	Year 4	Year 5
1. Revenues	48000000	96000000	144000000	192000000	240000000
Product/Service	48000000	96000000	144000000	192000000	240000000
(Units sold)	10000	20000	30000	40000	50000
(Unit price)	4800	4800	4800	4800	4800
2. Production Costs	31300000	62600000	93900000	125200000	156500000
(Units Cost)	3130	3130	3130	3130	3130
3. Expenses	22000000	21500000	21500000	21500000	21500000
Staff salaries	17500000	17500000	17500000	17500000	17500000
Sales & Marketing	4500000	4000000	4000000	4000000	4000000
Other Expenses	0	0	0	0	0
Pay back of set up expenses	0	-1325000	-1325000	-1325000	-1325000
Profit/Loss before tax	-5300000	10575000	27275000	43975000	60675000
4. Income Tax	0	3172500	8182500	13192500	18202500
5. Net Profit/Loss	-5300000	7402500	19092500	30782500	42472500
6. Start-up cost	7450000	0	0	0	0
7. Free Cash Flow	-12750000	7402500	19092500	30782500	42472500
8. Funding Required	15000000	0	0	0	0
9. Cash Balance	2250000	9652500	28745000	59527500	102000000

7. Conclusion

Kome88 is the ideal product to make cultivation in the terraces easier.